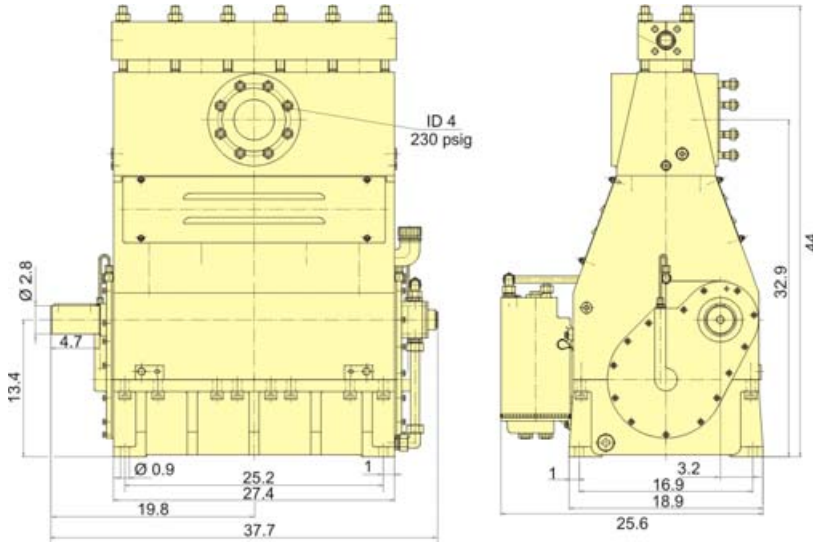


HDP 255 process plunger pump

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

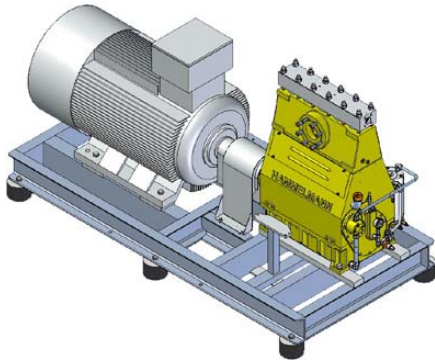
Weight: approx. 2,360 lbs



Dimensions: inches

Stationary unit with electric motor

Length: 118 in.
Width: 55 in.
Height: 63 in.
Weight: approx. 6,200 lbs at 250 HP



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.



Features

- Power ratings up to 270 HP
- Vertical 5 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 3 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

HAMMELMANN

HDP 255 series, technical data

Performance parameters

Q [GPM] *	Required power rating [HP]**						D	r.p.m.	
	100	125	150	200	250	300		n 1	n 2
Operating pressure [psig]									
5.7	26500	31900	39200	43500			17,5	1000	260
6.8	22000	26500	32500	39200	43500			1000/1200	310
8.1	18400	22200	27100	32600	39400	43500		1200	370
8.5	17700	21200	26100	31200	37700	43500		1500	390
7.4	20300	24400	29700	35800	37700		20	1000	260
8.9	17000	20300	24800	29700	36300	37700		1000/1200	310
10.7	14100	17000	20700	24900	30200	37700		1200	370
11.1	13500	16200	19900	23900	29000	36300		1500	390

* At pressures over 29000 psi approx. 5% of the flow rate is lost due to the compressibility factor of water

11.8	13100	15500	19100	22900	24200		25	1000	260
14.2	10900	13100	16000	19100	23200	24200		1000/1200	310
17.0	9000	10900	13300	16000	19300	24200		1200	370
17.7	8700	10400	12800	15200	18400	23200		1500	390

17.0	9000	10900	13200	16000	16800		30	1000	260
20.4	7500	9000	11000	13200	16100	16800		1000/1200	310
24.5	6200	7500	9100	11000	13300	16800		1200	370
25.5	5900	7300	8800	10600	12800	16000		1500	390
23.2	6700	8000	9700	11600	12300		35	1000	260
27.8	5500	6700	8100	9700	11700	12300		1000/1200	310
33.3	4600	5500	6800	8100	9900	12300		1200	370
34.8	4400	5200	6500	7800	9400	11700		1500	390
30.6	5100	6100	7400	9000	9400		40	1000	260
36.6	4200	5100	6200	7400	9000	9400		1000/1200	310
44.0	3500	4200	5200	6200	7500	9400		1200	370
45.9	3300	4100	4900	5900	7300	9000		1500	390
39.1	3900	4800	5800	7000	7400		45	1000	260
46.8	3300	3900	4900	5800	7100	7400		1000/1200	310
56.2	2800	3300	4100	4900	5900	7400		1200	370
58.7	2600	3200	3900	4600	5700	7100		1500	390
48.8	3200	3900	4800	5700	6100		50	1000	260
58.5	2600	3200	3900	4800	5800	6100		1000/1200	310
70.2	2200	2600	3300	3900	4800	5900		1200	370
73.3	2200	2600	3200	3800	4600	5800		1500	390
59.1	2600	3200	3900	4600	4900		55	1000	260
70.8	2200	2600	3200	3900	4800	4900		1000/1200	310
84.9	1900	2200	2800	3200	3900	4900		1200	370
88.6	1700	2000	2600	3000	3800	4800		1500	390
70.3	2200	2600	3300	3900	4200		60	1000	260
84.1	1900	2300	2800	3300	3900	4200		1000/1200	310
101.0	1500	1900	2300	2800	3300	4200		1200	370
105.5	1400	1700	2200	2600	3200	3900		1500	390
95.7	1700	1900	2300	2900	3000		70	1000	260
114.6	1400	1700	2000	2300	2900	3000		1000/1200	310
137.5	1200	1400	1700	2000	2500	3000		1200	370
143.6	1100	1300	1600	1900	2300	2900		1500	390

* GPM = 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 hp = 0,746 kW

Op.pressure 1 psi = 0,069 bar

Flow rate 1 gpm = 0,227 m³/h

- Rod force: 18,430 lbf
- Stroke: 2.95 inch
- Mean piston speed at n₂
260 r.p.m. = 2.13 feet/sec
310 r.p.m. = 2.56 feet/sec
370 r.p.m. = 3.05 feet/sec
390 r.p.m. = 3.18 feet/sec

