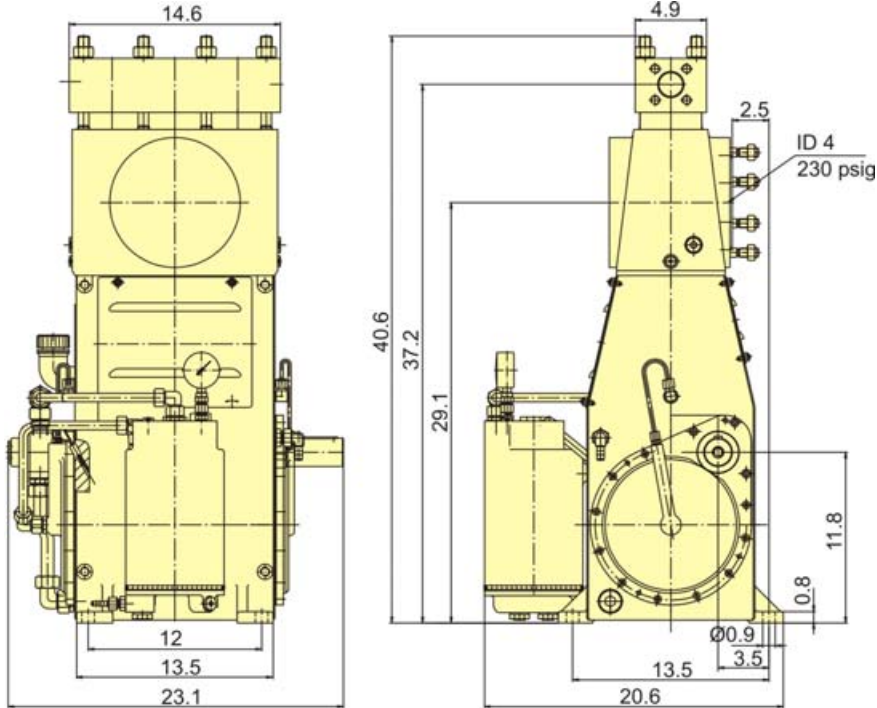


# HDP 125 process plunger pump

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. 840 lbs



Dimensions: inch



## Features

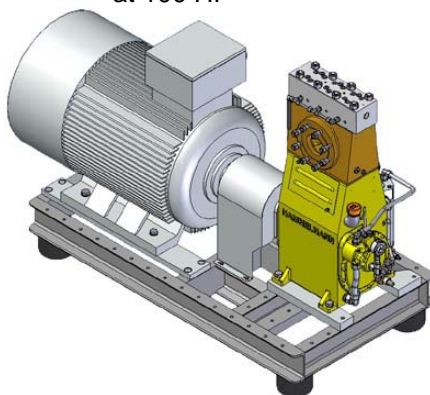
- Power ratings up to 120 HP
- Vertical 3 cylinder design
- Wide variety of complementary ancillaries

## 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: 73 inch  
Width: 33 in.  
Height: 51 in.  
Weight: approx. 3,500 lbs at 100 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 bellows system is gastight.

# HDP 125 series, technical data

## Performance parameters

Q [GPM] *	Required power rating [HP]**					D	r.p.m.	
	50	60	75	100	125		n 1	n 2
Operating pressure [psig]								
2.3	31600	38400	43500			17,5	1000	245
2.7	26100	31900	38400	43500			1000/1200	295
3.3	21800	26100	32600	43500			1200	350
3.5	21000	25700	31300	42800	43500		1500	365
3.1	29400	36000	37800	37800		20	1000	245
3.7	24500	29900	37800	37800			1000/1200	295
4.4	20300	24900	33900	37700			1200	350
4.6	19600	23900	32600	32600	37700		1500	365
4.9	15500	18900	23100	24200			25	1000
5.9	12900	15700	19100	24200		1000/1200		295
7.1	10700	13100	16000	21800	24200	1200		350
7.4	10300	12500	15400	20900	24200	1500		365
7.0	10700	13100	16000	16800		30	1000	245
8.5	8800	10900	13200	16800			1000/1200	295
10.2	7400	9000	11000	15100	16800		1200	350
10.6	7100	8700	10600	14500	16800		1500	365
9.6	7800	9600	11700	12300		35	1000	245
11.5	6500	8000	9700	12300			1000/1200	295
13.9	5400	6700	8100	11000	12300		1200	350
14.4	5200	6400	7800	10600	12300		1500	365
12.7	5900	7400	9000	9400		40	1000	245
15.2	4900	6100	7400	9400			1000/1200	295
18.3	4200	5100	6200	8400	9400		1200	350
19.0	3900	4900	5900	8400	9400		1500	365
16.2	4800	5800	7100	7400		45	1000	245
19.5	3900	4800	5800	7400			1000/1200	295
23.4	3300	4100	4900	6700	7400		1200	350
24.3	3200	3800	4600	6400	7400		1500	365
20.3	3900	4600	5800	6100		50	1000	245
24.3	3200	3900	4800	6100			1000/1200	295
29.2	2600	3200	3900	5400	6100		1200	350
30.3	2600	3000	3800	5200	6100		1500	365
24.5	3200	3900	4800	4900		55	1000	245
29.4	2600	3200	3900	4900			1000/1200	295
35.4	2200	2600	3200	4500	4900		1200	350
36.7	2000	2600	3200	4400	4900		1500	365
29.1	2600	3200	3900	4200		60	1000	245
35.0	2200	2600	3300	4200			1000/1200	295
42.1	1800	2200	2800	3800	4200		1200	350
43.7	1700	2200	2600	3600	4200		1500	365
39.6	1900	2300	2900	3000		70	1000	245
47.6	1600	1900	2300	3000			1000/1200	295
57.3	1400	1700	2000	2800	3000		1200	350
59.5	1300	1600	1900	2600	3000		1500	365

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

- Rod force: 18,430 lbf
- Stroke: 2.17 inch
- Mean piston speed at n<sub>2</sub>
  - 250 r.p.m. = 1.48 feet/sec
  - 300 r.p.m. = 1.77 feet/sec
  - 360 r.p.m. = 2.13 feet/sec
  - 365 r.p.m. = 2.20 feet/sec



\* 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 m<sup>3</sup>/h

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