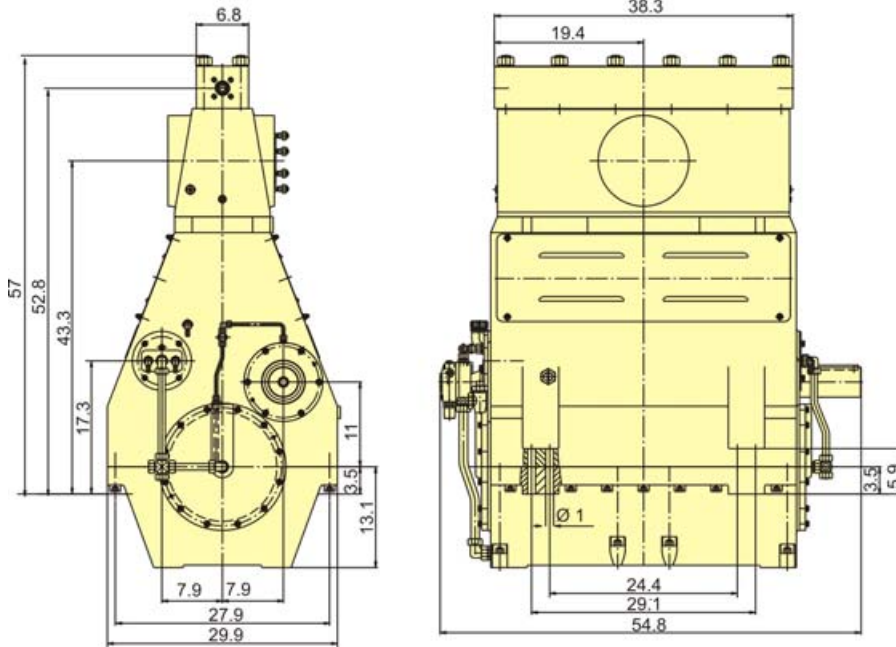


HDP 755 process plunger pump

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. 8,150 lbs



Dimensions: inches



Features

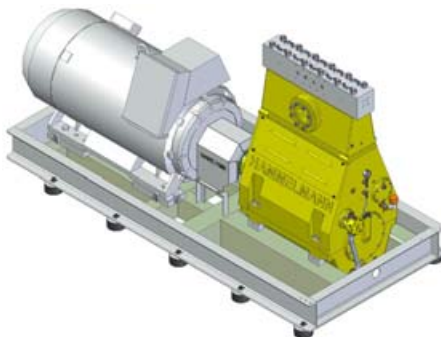
- Power ratings up to 860 HP
- Vertical 5 cylinder design
- Wide variety of complementary ancillaries

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 4 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: 138 inch
 Width: 63 inch
 Height: 76 inch
 Weight: approx. 17,400 lbs at 860 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.

HDP 755 series, technical data

Performance parameters

Q [GPM] *	Required power rating [HP]**						D	r.p.m.	
	500	540	610	700	800	860		n 1	n 2
	Operating pressure [psig]								
15.5	43500						28	1000	210
18.5	37000	41300	43500					1000/1200	255
22.6	30500	34100	38400	43500				1200/1470	310
26.7	26100	29000	32600	36300	41300	43500		1420/1730	365
24.4	28900	30200					35	1000	210
29.3	23800	26700	30000					1000/1200	255
35.7	19600	22200	24900	27700	30000			1200/1470	310
42.2	16700	18900	21200	23500	26400	29700		1420/1730	365

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

32.2	22200	23100					40	1000	210
38.7	18100	20400	23100					1000/1200	255
47.1	15100	17000	19000	21200	23100			1200/1470	310
55.7	12800	14400	16200	18000	20200	22600		1420/1730	365

41.3	17400	18300					45	1000	210
49.5	14400	16100	18300					1000/1200	255
60.3	11900	13300	15100	16700	18300			1200/1470	310
71.3	10200	11300	12800	14200	16000	18000		1420/1730	365
51.4	14100	14800					50	1000	210
61.7	11600	13100	14800					1000/1200	255
75.2	9600	10900	12200	13500	14800			1200/1470	310
89.0	8100	9100	10300	11500	12600	14500		1420/1730	365
62.9	11600	12200					55	1000	210
75.5	9600	10700	12200					1000/1200	255
92.0	8000	9000	10000	11200	12200			1200/1470	310
108.8	6700	7500	8600	9600	10600	12000		1420/1730	365
75.6	9900	10300					60	1000	210
90.8	8000	9000	10300					1000/1200	255
110.6	6700	7500	8400	9400	10300			1200/1470	310
130.9	5700	6400	7100	8000	9000	10000		1420/1730	365
89.7	8300	8700					65	1000	210
107.7	6800	7700	8700					1000/1200	255
131.2	5700	6400	7300	8000	8700			1200/1470	310
155.2	4800	5400	6100	6800	7500	8600		1420/1730	365
103.9	7100	7500					70	1000	210
124.9	5900	6700	7500					1000/1200	255
152.1	4900	5500	6200	6800	7500			1200/1470	310
180.0	4100	4600	5200	5800	6500	7400		1420/1730	365
119.5	6200	6500					75	1000	210
143.3	5100	5800	6500					1000/1200	255
174.7	4200	4800	5400	5900	6500			1200/1470	310
206.6	3600	4100	4600	5100	5700	6400		1420/1730	365
135.9	5500	5800					80	1000	210
163.1	4500	5100	5800					1000/1200	255
198.7	3800	4200	4800	5200	5800			1200/1470	310
235.1	3200	3600	4100	4500	5100	5700		1420/1730	365

172.0	4400	4500					90	1000	210
206.4	3500	4100	4500					1000/1200	255
251.5	2900	3300	3800	4200	4500			1200/1470	310
297.6	2500	2800	3200	3500	3900	4500		1420/1730	365
212.4	3500	3600					100	1000	210
254.8	2900	3200	3600					1000/1200	255
310.5	2300	2600	3000	3300	3600			1200/1470	310
367.4	2000	2300	2600	2900	3200	3600		1420/1730	365
257.0	2900	3000					110	1000	210
308.3	2300	2700	3000					1000/1200	255
375.7	2000	2200	2500	2800	3000			1200/1470	310
444.5	1700	1900	2100	2300	2600	3000		1420/1730	365
305.7	2500						120	1000	210
366.9	2000	2200	2500					1000/1200	255
447.1	1700	1900	2100	2300	2500			1200/1470	310
529.0	1400	1600	1800	2000	2200	2500		1420/1730	365

- Rod force: 45,000 lbf
- Stroke: 3.94 inch
- Mean piston speed at n₂
 - 210 r.p.m. = 2.29 feet/sec
 - 255 r.p.m. = 2.79 feet/sec
 - 310 r.p.m. = 3.38 feet/sec
 - 365 r.p.m. = 4.00 feet/sec



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

* 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

Hammelmann Corp. 600 Progress Road
Dayton, Ohio 45449
eMail: mail@hammelmann.com

Phone (001) 937-859-8777
Fax: (001) 937-859-9188
http://www.hammelmann.com

