

HDP 250 L High Pressure Pump series

Design criteria

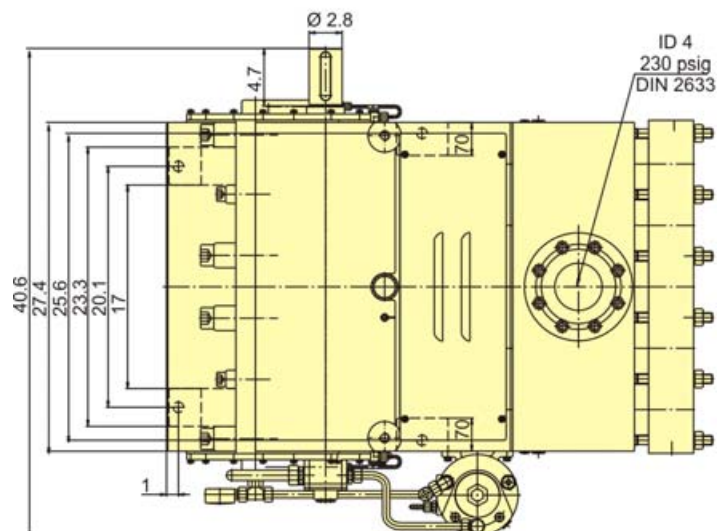
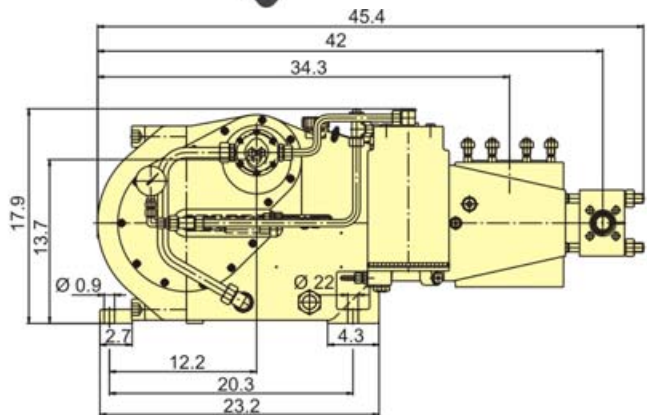
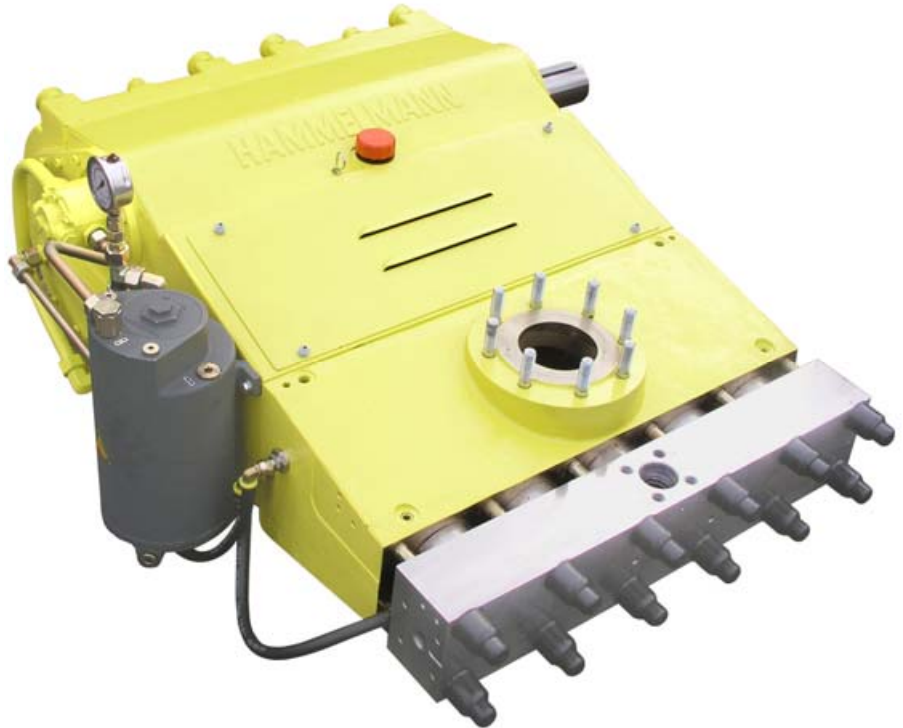
Hammelmann high pressure pumps are built to operate at the continuous maximum duty stated in the performance parameters. Just compare the crankshaft speed, average plunger speed, plunger diameter and power rating.

Features

- Power ratings up to 335 HP
- Horizontal 5 cylinder design
- Wide variety of complementary ancillaries

Quality and reliability

- Stainless steel pump head free of alternating stress
- Cross head piston bellows seal
- Choice of application specific seal assemblies
- Solid ceramic or tungsten carbide plungers
- Choice of bronze or stainless steel suction chamber
- Crank section calculation by 'Finite element method' ensures long working life under continuous load
- Crankshaft supported by 3 bearings and incorporating twin helical speed reducing gears
- Pressurised oil lubrication system with oil cooler/filter



High pressure pump
Weight: approx. 2300 lbs

Dimensions: inches

Technical data, series HDP 250 L

Performance parameters

Q [GPM]*	Required power rating [HP]					D	r.p.m.	
	150	175	215	270	335		n 1	n 2
Operating pressure [psig]								
8.4	26100	32600	39900	43500		17,5	1500	390
10.0	21800	26100	32600	41300	43500		1500/1800	465
12.1	18100	21800	26100	34100	43500		1800/2150	555
11.1	19600	23900	30500	37700		20	1500	390
13.2	16700	19600	23900	31200	37700		1500/1800	465
15.8			19600	24700	32600		1800/2150	555
17.7			18100	23200	23900	25	1500	390
21.1				18900	23900		1500/1800	465
25.3					19600		1800/2150	555
25.6	8800	10600	12900	16000	16800	30	1500	390
30.6	7400	8800	10700	13300	16700		1500/26000	465
36.7	6100	7400	9000	11200	13900		26000/2150	555
34.8	6500	7800	9400	11700	12300	35	1500	390
41.7	5400	6500	7800	9900	12300		1500/26000	465
49.9	4500	5400	6500	8100	10300		26000/2150	555
45.9	4900	5900	7300	9000	9400	40	1500	390
54.9	4100	4900	5900	7500	9400		1500/26000	465
65.7	3500	4100	4900	6200	7800		26000/2150	555
58.6	3900	4600	5700	7100	7400	45	1500	390
70.2	3200	3900	4800	5900	7100		1500/26000	465
84.2	2800	3200	3900	4900	6200		26000/2150	555
73.1	3200	3800	4600	5800	6200	50	1500	390
87.6	2600	3200	3800	4800	5900		1500/26000	465
105.1	2200	2600	3200	3900	4900		26000/2150	555
89.5	2600	3000	3800	4800	4900	55	1500	390
107.2	2200	2600	3200	3900	4900		1500/26000	465
128.3	1700	2200	2600	3300	4100		26000/2150	555
104.3	2200	2600	3200	3900	4200	60	1500	390
124.9	1700	2200	2600	3300	4100		1500/26000	465
149.7	1500	1700	2200	2800	3500		26000/2150	555
142.0	1600	1900	2300	2900	3000	70	1500	390
170.0	1300	1600	1900	2500	3000		1500/26000	465
202.2	1000	1300	1500	2000	2500		26000/2150	555

* At pressures over 29,000 psi approx. 5% of the flow rate is lost due to the compressibility factor of water

- Rod force: 18,430 lbf
- Stroke: 2.95 inch
- Mean piston speed at n₂
 - 390 r.p.m. = 3.2 feet/sec
 - 465 r.p.m. = 3.8 feet/sec
 - 555 r.p.m. = 4.6 feet/sec

D = Piston/Plunger dia. [mm]
n1 = Motor/Engine r.p.m.
n2 = Crankshaft