

HDP 20 High Pressure Pump Series

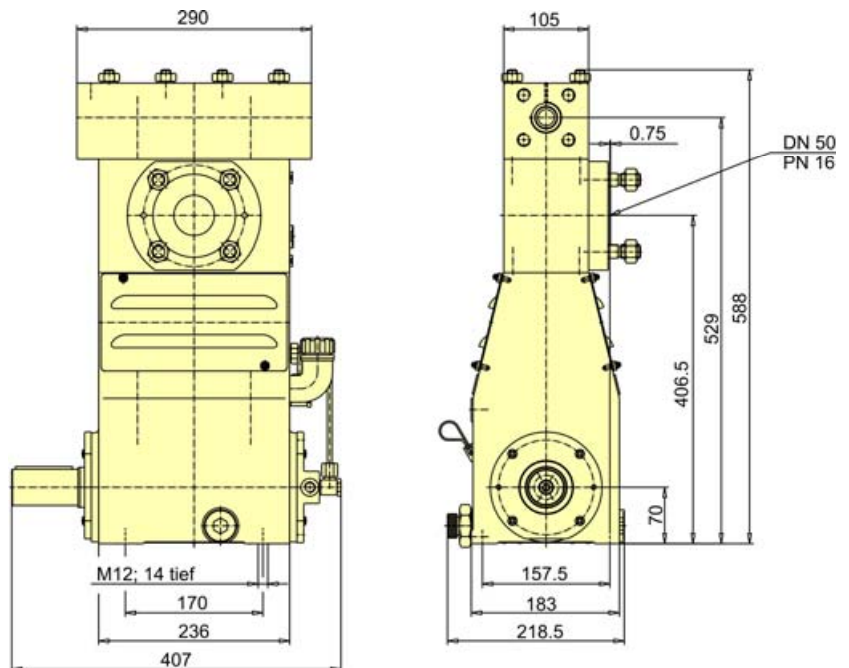
Hammelmann high pressure pumps are built to operate at the continuous maximum duty stated in the performance parameters. Just compare the crank shaft speed, average plunger speed, plunger diameter and power rating.

Features

- Power ratings up to 30 kW
- Vertical 3 cylinder design
- Wide variety of complementary ancillaries
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Quality and reliability

- Stainless steel stress free pump head
- Bellows form hermetic seal between the suction chamber and crank section
- Choice of application specific seal assemblies
- Solid ceramic or tungsten carbide plungers
- Choice of bronze (standard) or stainless steel suction chamber
- Crank section calculation by 'Finite element method' ensures long working life under continuous load
- Pressurised oil lubrication system
- Separate oil pump



High Pressure Pump

Weight: 95 kg

HDP 20 series, technical data

Calculated performance parameters
(Rights reserved to modify design)

Q [l/min]*	Required power rating [kW]					D	r.p.m.	
	11	15	18,5	22	30		n ₁	n ₂
	Operating pressure [bar]							
2,2	2200	3000	3500			8	1500 / 1800 / 2150	625
2,7	1850	2500	3100	3500				750
3,2	1550	2100	2600	3100	3500			900
3,5	1400	1950	2200			10	1500 / 1800 / 2150	625
4,2	1150	1600	2000	2200				750
5,1	980	1300	1650	1950	2200			900
6	940	1250	1550			12	1500 / 1800 / 2150	625
7	810	1100	1350	1550				750
8	710	960	1150	1400	1550			900

- Rod force: 17,6 kN
- Stroke: 30m
- Mean piston speed at n₂
 - 625 r.p.m. = 0,63 m/sec
 - 750 r.p.m. = 0,75 m/sec
 - 900 r.p.m. = 0,90 m/sec

* At pressures over 2000 bar approx. 5% of the flow rate is lost due to the compressibility factor of water

9	630	860	990			15	1500 / 1800 / 2150	625
11	520	710	870	1000				750
13	450	610	730			17,5	1500 / 1800 / 2150	625
15	390	530	650	730				750
17	350	470	560			20	1500 / 1800 / 2150	625
20	290	400	500	560				750
26	230	310	350			25	1500 / 1800 / 2150	625
31	190	260	320	360				750
38	160	220	240			30	1500 / 1800 / 2150	625
46	130	180	220	250				750
52	120	160	180			35	1500 / 1800 / 2150	625
62	100	130	160	180				750
68	90	120	140			40	1500 / 1800 / 2150	625
81	70	100	120	140				750
86	70	100	110			45	1500 / 1800 / 2150	625
103	60	80	100	110				750

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

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