

# HDP 40 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 crank shaft speed, average plunger speed, plunger diameter and power rating.

## Features

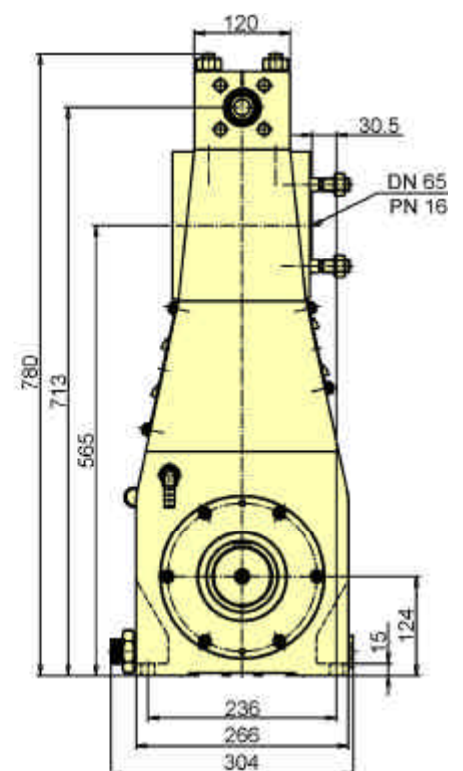
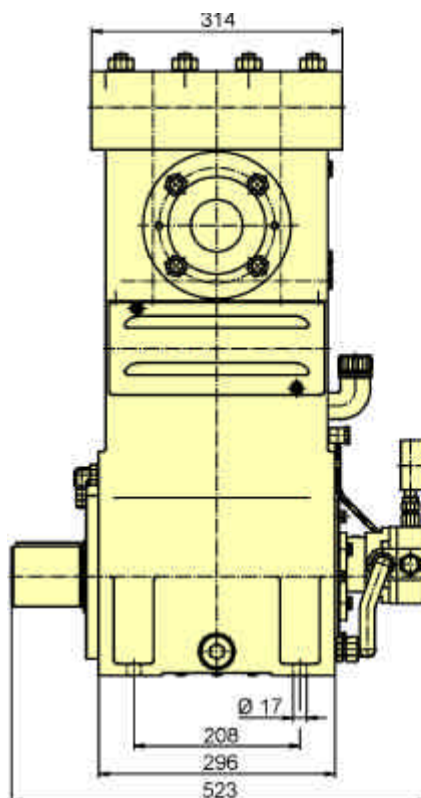
- Power ratings up to 37 kW
- Vertical 3 cylinder design
- Wide variety of complementary ancillaries

## 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



Weight: approx. 200 kg



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# HDP 40 series, technical data

## Performance parameters

Q [l/min]*	Required power rating [kW]					D	r.p.m.	
	15	18,5	22	30	37		n 1	n 2
	operating pressure [bar]							
5,5	1350	1650	2050	2800	3450	12	1500 / 1800 / 2150	625
6,5	1100	1400	1650	2350	2900	12		750
7,5	930	1150	1350	1850	2400	12		900
9	860	1060	1250	1700	2200	15		625
11	720	880	1050	1450	1750	15		750
13	600	740	880	1200	1500	15		900
12,5	630	780	930	1250	1550	17,5		625
15	530	650	770	1050	1300	17,5		750
18	440	540	650	880	1100	17,5		900

- Rod force: 39 kN
- Stroke: 30 mm
- Mean piston speed at n<sub>2</sub>  
 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

16,5	480	600	710	970	1200	20	1500 / 1800 / 2150	625
20	400	500	590	810	1000	20		750
20	400	490	590	800	980	22		625
24	330	410	490	670	820	22		750
24	330	410	490	670	830	24		625
29	280	340	410	560	690	24		750
28	280	350	420	570	710	26		625
34	240	290	350	480	590	26		750
38	210	260	310	430	530	30		625
45	180	220	260	360	440	30		750
52	150	190	230	310	390	35		625
62	130	160	190	260	320	35		750
68	120	150	170	240	300	40		625
82	100	125	145	200	250	40		750
86	95	115	140	190	230	45		625
103	80	95	115	160	190	45		750
107	75	95	110	150	190	50		625
128	65	80	95	130	160	50		750
129	60	80	90	125	160	55		625
155	50	65	75	105	130	55		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

## Type designations

Sealing system	D	HDP Type
Hydrodynamic with tungsten carbide plungers	12 - 17,5	44
Labyrinth with solid ceramic plungers	20 - 55	42
Packed sleeves with solid ceramic plungers	20 - 55	47

D = Piston/Plunger dia. [mm]

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