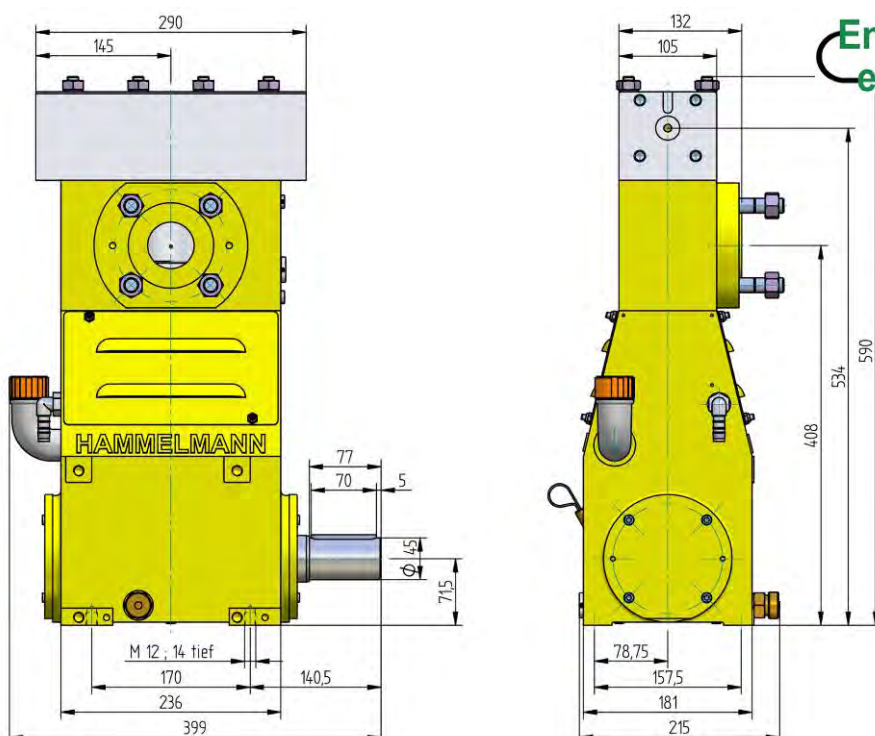


HDP 10 High Pressure Pump Series

Hammelmann process pumps are built to operate at continuous maximum duty. Just compare the crank shaft speed, average plunger speed and power rating.

High Pressure Pump

Weight: 94 kg



Features

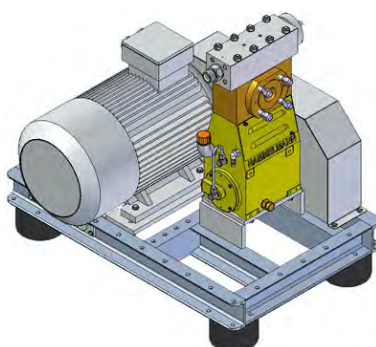
- Power ratings up to 11 kW
- Vertical 3 cylinder design

Quality and reliability

- Crank section calculation by 'Finite element method' ensures long working life under continuous load
- Splash lubricated crank section
- Bellows form hermetic seal between the suction chamber and crank section
- Stainless steel or bronze 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
- Flow control achieved with variable speed gear or frequency converter
- Flow turndown ratio 1:10

Stationary unit with electric motor

- Length: 1000 mm
- Width: 752 mm
- Height: 890 mm
- Weight: approx. 370 kg at 11 kW



Main dimensions without accessories such as suction line, pressure regulator etc. All shown as right side drive. Detailed dimensional drawings and weights available on request.

HDP 10 series, technical data

Performance parameters

HDP	Q [l/min]	Required power rating [kW]			D	r.p.m.	
		5,5	7,5	11			
		Operating pressure [bar]					
14	2,2	1100	1510	2200	8	1500/1800/2150	625
	2,7	920	1260	1850			750
	3,2	770	1050	1540			900
	3,5	710	970	1400	10		625
	4,2	600	810	1180			750
	5,1	500	670	1000			900
13	3,5	710	970	1400	10	1500/1800/2150	625
	4,2	600	810	1180			750
	5,1	500	670	1000			900
	5,8	500	670	1000	12		625
	6,9	410	560	820			750
	8,3	340	470	680			900
12	9	320	430	630	15	1500/1800/2150	625
	11	260	360	530	17,5		750
	12	230	320	460			625
	15	200	260	400	20		750
	16	180	240	350			625
	20	150	200	300	25		750
	25	110	150	230			625
	30	100	130	200	30		750
	37	80	110	160			625
	45	70	100	130	35		750
	51	60	80	120			625
	62	50	70	100	40		750
	68	40	60	100			625
	81	40	50	70	45		750
	86	40	50	70			625
	103	30	40	60			750

- Rod force: 11,7 kN
- Stroke: 30 mm
- 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



Hammelmann plunger pumps convert 93 to 98 % of the shaft power to hydraulic energy.

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

D = Piston/Plunger dia. [mm]

n₁ = Motor/Engine r.p.m.

n₂ = Crankshaft r.p.m.

HDP	Seal*	Sealing system
14	Dynamic	Tungsten carbide plunger & bushing
	Packing	Special ceramic plunger** / packing
13	Dynamic	Ceramic plunger / bronze bushing
	Packing	Ceramic plunger / packing
12	Dynamic	Ceramic plunger / bronze bushing
	Packing	Ceramik plunger / packing

* The dynamic high pressure sealing extends the advantages of the labyrinth design with further increased efficiency.

** Special ceramic plungers up to max. 2500 bar

+44 1905 751790
 sales@calder.co.uk
 www.calderltd.com

Calder Ltd
 Prescott Drive
 Worcester
 WR4 9NE
 United Kingdom

HAMMELMANN®

01/21 © Copyright Hammelmann GmbH, Oelde, Germany
 Subject to modification.