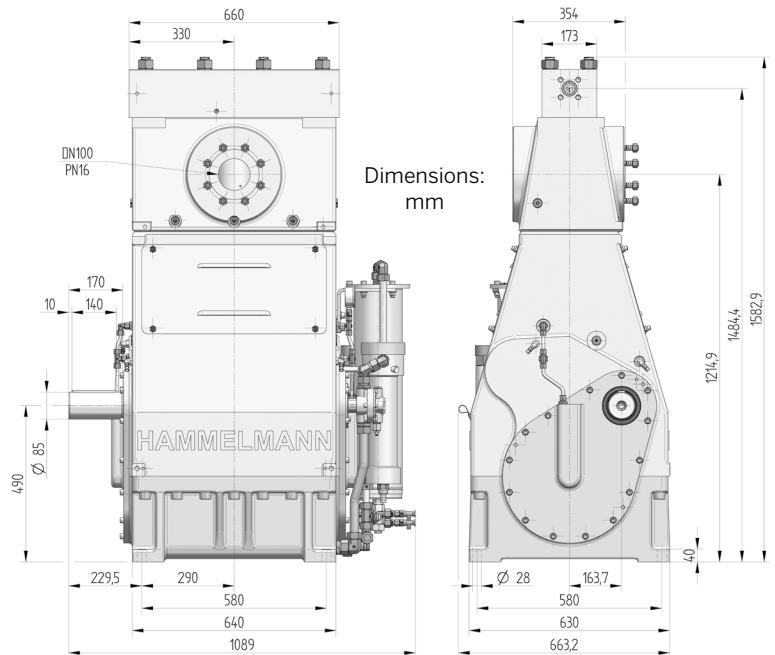


HAMPRO® 500 Process plunger pump

HAMMELMANN®

Hammelmann process 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.



Quality and reliability

- Crank section calculation by 'Finite element method' ensures long working life under continuous load
- Stainless steel pump head free of alternating stress
- Integral speed reduction gear
- Pressurised oil lubrication system with oil cooler/filter
- Bellows form hermetic seal between the suction chamber and crank section
- Large selection of materials available for different fluids
- Minimum crankshaft speed with external oilpump 50 r.p.m.

Features

- Power ratings up to 500 kW
- Vertical 3 cylinder design

Technical details HAMPRO® 500

Operating pressure	Flow rate
up to 3000 bar	up to 77 m ³ /h
Design	Weight
Vertical 3 cylinder design	~ 1960 kg

Weight and dimensions refer to the pump only, without accessories. Detailed dimensional drawings and weights on request.

The bellow system is gastight.



Zero Emission



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.

Technical data, series HAMPRO® 500: Performance parameters (standard design)

HAM PRO®	Q** [l/min]	Q** [m³/h]	Required power rating [kW]			D [mm]	r.p.m.	
			300	400	500		n1	n2
			Operating pressure [bar]					
504	52	3,1	3000			28	1500	315
	52	3,1	2600	3000			1362/1659	*350
	77	4,6	2100	2750			1800	465
	68	4,1	2250			32	1500	315
	70	4,2	2000	2600			1362/1659	*350
	100	6,0	1530	2050	2550		1800	465
	83	5,0	1850			35	1500	315
	86	5,2	1650	2150			1362/1659	*350
122	7,3	1250	1700	2200	1800		465	

503	113	6,8	1430			40	1500	315
	116	7,0	1250	1650			1362/1659	*350
	166	10,0	980	1300	1630		1800	465
	143	8,6	1130			45	1500	315
	150	9,0	1000	1300			1362/1659	*350
	212	12,7	770	1030	1290		1800	465

502	178	10,7	920			50	1500	315
	189	11,3	800	1050			1362/1659	*350
	262	15,7	620	830	1040		1800	465
	214	12,8	760			55	1500	315
	232	13,9	650	880			1362/1659	*350
	313	18,8	520	690	860		1800	465
	258	15,5	640			60	1500	315
	277	16,6	560	740			1362/1659	*350
	377	22,6	430	580	720		1800	465
	306	18,4	540			65	1500	315
	329	19,7	480	630			1362/1659	*350
	447	26,8	370	490	620		1800	465
	354	21,2	470			70	1500	315
	382	22,9	420	540			1362/1659	*350
	518	31,1	320	420	530		1800	465
	407	24,4	410			75	1500	315
	440	26,4	360	470			1362/1659	*350
	595	35,7	280	370	460		1800	465
	449	26,9	360			80	1500	315
	503	30,2	320	410			1362/1659	*350
656	39,4	240	320	410	1800		465	

501 High flow	449	26,9	360			80	1500	315
	503	30,2	320	410			1362/1659	*350
	656	39,4	240	320	410		1800	465
	507	30	320			85	1500	315
	570	34	280	360			1362/1659	*350
	741	44	220	290	360		1800	465
	574	34	280			90	1500	315
	642	39	250	330			1362/1659	*350
	839	50	190	260	320		1800	465
	709	43	230			100	1500	315
	795	48	200	260			1362/1659	*350
	1036	62	150	210	260		1800	465
	875	53	190			110	1500	315
	965	58	170	220			1362/1659	*350
	1280	77	130	170	210		1800	465

Data

- Rod force: 210 kN
- Stroke: 100 mm
- Mean plunger speed at n2:

315 r.p.m. = 1,06 m/sec

350 r.p.m. = 1,27 m/sec

465 r.p.m. = 1,54 m/sec

Certificates

- Machine directive 2006/42/EG
- ATEX 2014/34/EG
- API 674
- TA-Luft (Clean Air)
- NORSOK M501
- NORSOK M650
- NACE MR0175

Standards

- DIN EN ISO 9001
- DIN EN ISO 14001
- DIN EN ISO 50001
- BS OHSAS 18001
- ASME-U
- Achilles
- EAC



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

**Data refer to the medium water (compressibility considered)

* Speed limit for continuous service according to API 674 – 6.3.1

D = Plunger diameter

n1 = Motor/Engine r.p.m.

n2 = Crankshaft r.p.m.