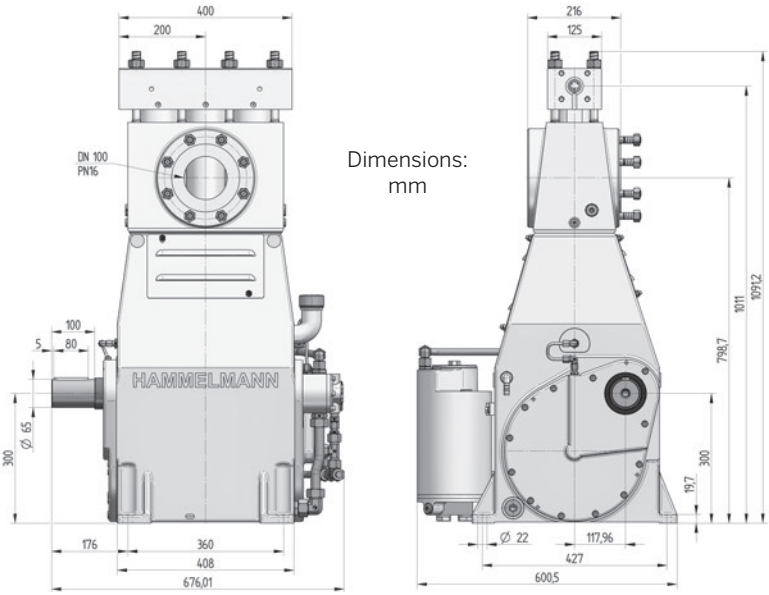
HAMPRO® 200 Process plunger pump

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.



Dimensions: mm

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 32 r.p.m.

Features

- Power ratings up to 200 kW
- Vertical 3 cylinder design

Technical details HAMPRO® 200

Operating pressure	Flow rate
up to 3200 bar	up to 29,3 m^3/h
Design	**Weight**
Vertical 3 cylinder design	~ 525 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

ZERO EMISSION VDI 2440

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® 200: Performance parameters (standard design)

HAM PRO®	Q** [l/min]	Q** [m³/h]	Required power rating [kW] 75	110	132	200	D [mm]	r.p.m. n1	n2
			Operating pressure [bar]						
204	18	1,08	1950	2850	3200		17,5	1220/1444	*400
	20	1,20	1900	2850	3200			1500	416
	28	1,68	1350	2000	2350	3200		1800/2150	593
	23	1,38	1500	2200	2650	2800	20	1220/1444	*400
	28	1,68	1450	2100	2500	2800		1500	416
	40	2,40	1000	1500	1750	2800		1800/2150	593
203	39	2,3	950	1400	1700		25	1220/1444	*400
	43	2,6	950	1350	1650			1500	416
	62	3,7	650	950	1150	1750		1800/2150	593
	50	3,0	750	1100	1350		28	1220/1444	*400
	55	3,3	750	1100	1300			1500	416
	78	4,7	500	750	900	1400		1800/2150	593
202	58	3,5	650	950	1150		30	1220/1444	*400
	61	3,7	650	950	1150			1500	416
	87	5,2	450	650	800	1200		1800/2150	593
	74	4,5	590	860	1020		33	1220/1444	*400
	77	4,6	570	830	990			1500	416
	111	6,7	400	580	700	1050		1800/2150	593
	80	4,8	490	720	860		35	1220/1444	*400
	84	5,0	470	690	830			1500	416
	120	7,2	330	490	580	880		1800/2150	593
	106	6,4	370	550	660		40	1220/1444	*400
	111	6,7	360	530	640			1500	416
	158	9,5	250	370	450	690		1800/2150	593
	136	8,2	290	430	520		45	1220/1444	*400
	143	8,6	290	420	510			1500	416
	202	12,1	200	300	360	540		1800/2150	593
	168	10,1	240	350	420		50	1220/1444	*400
	178	10,7	230	340	410			1500	416
	252	15,1	160	240	290	440		1800/2150	593
	205	12,3	190	290	350		55	1220/1444	*400
	216	13,0	190	280	340			1500	416
	303	18,2	140	200	240	360		1800/2150	593
	245	14,7	160	240	290		60	1220/1444	*400
	254	15,2	160	240	280			1500	416
	359	21,5	110	170	200	300		1800/2150	593
	289	17,3	140	200	250		65	1220/1444	*400
	298	17,9	140	200	240			1500	416
	425	25,5	100	140	170	260		1800/2150	593
	335	20,1	120	180	210		70	1220/1444	*400
	346	20,8	120	170	210			1500	416
	489	29,3	80	120	150	220		1800/2150	593

Data

- Rod force: 88 kN
- Stroke: 75 mm
- Mean plunger speed at n2:

400 r.p.m. = 1,00 m/sec
416 r.p.m. = 1,04 m/sec
593 r.p.m. = 1,48 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

ENERGY EFFICIENT

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.

Hammelmann GmbH
Carl-Zeiss-Straße 6–8
59302 Oelde • Germany
mail@hammelmann.de
Tel.: (0) 25 22 / 76 - 0
Fax: (0) 25 22 / 76 - 140
www.hammelmann-process.com

HAMMELMANN®