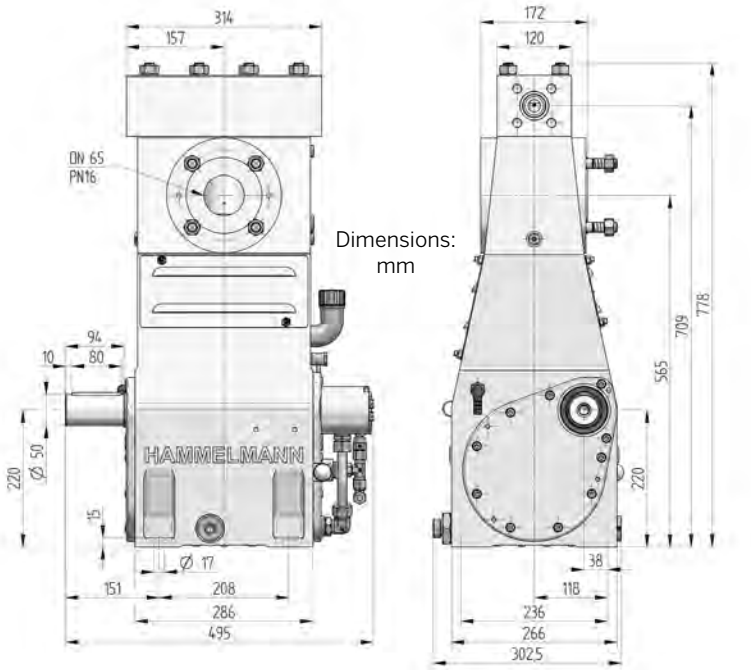
HAMPRO® 70 Process plunger pump

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 36 r.p.m.

Features

- Power ratings up to 70 kW
- Vertical 3 cylinder design

Technical details HAMPRO® 70

Operating pressure	Flow rate
up to 3500 bar	up to 12,1 m^3/h
Design	**Weight**
Vertical 3 cylinder design	~ 215 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.

HAMMELMANN®

Technical data, series HAMPRO® 70: Performance parameters (standard design)

HAM PRO®	Q** [l/min]	Q** [m³/h]	Required power rating [kW]			D [mm]	r.p.m.	
			30	45	70			
			Operating pressure [bar]				n1	n2
74	4,8	0,29	2650	3500		12	960/1123	*470
	7,2	0,43	2000	3000			1500	625
	11	0,66	1400	2100	3000		1800/2150	900
	8,4	0,50	1700	2400		15	960/1123	*470
	11,9	0,71	1250	1900			1500	625
	17,2	1,03	890	1300	2050		1800/2150	900
	11,8	0,71	1250	1750		17,5	960/1123	*470
	17	1,02	930	1400			1500	625
	23	1,38	650	980	1500		1800/2150	900
73	16	0,96	950	1350		20	960/1123	*470
	21	1,26	710	1050			1500	625
	26	1,56	600	900	1350		1500/1800	750
72	19	1,14	750	1100		22	960/1123	*470
	26	1,56	600	900	1130		1500	625
	32	1,92	500	750	1130		1500/1800	750
	23	1,38	650	950		24	960/1123	*470
	32	1,92	500	750	950		1500	625
	38	2,28	420	630	950		1500/1800	750
	27	1,6	570	800		26	960/1123	*470
	38	2,3	430	640	810		1500	625
	45	2,7	350	530	810		1500/1800	750
	37	2,2	420	600		30	960/1123	*470
	50	3,0	320	480			1500	625
	59	3,5	260	400	600		1500/1800	750
	51	3,1	310	440		35	960/1123	*470
	69	4,1	230	350			1500	625
	81	4,9	190	290	440		1500/1800	750
	68	4,1	240	340		40	960/1123	*470
	91	5,5	180	270			1500	625
	107	6,4	150	220	340		1500/1800	750
	86	5,2	190	270		45	960/1123	*470
	115	6,9	140	210			1500	625
	135	8,1	110	170	270		1500/1800	750
	107	6,4	150	210		50	960/1123	*470
	142	8,5	110	170			1500	625
	167	10,0	90	140	210		1500/1800	750
	130	7,8	120	180		55	960/1123	*470
	172	10,3	90	140			1500	625
	201	12,1	60	100	150		1500/1800	750

Data

- Rod force: 43 kN
- Stroke: 40 mm
- Mean plunger speed at n2:

  470 r.p.m. = 0,63 m/sec
  625 r.p.m. = 0,84 m/sec
  750 r.p.m. = 1,00 m/sec
  900 r.p.m. = 1,20 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.

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