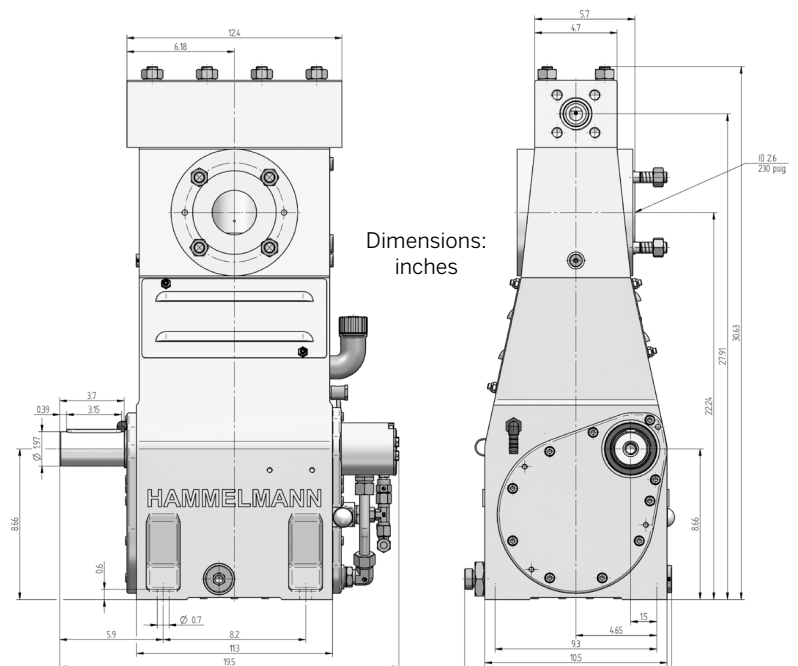
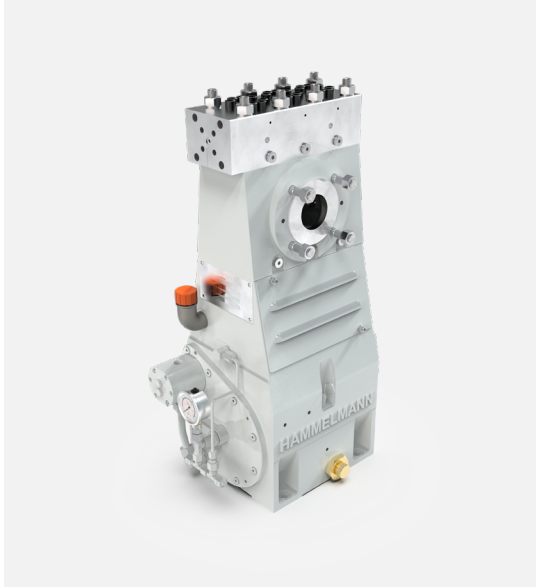


HAMPRO® 70 Process plunger pump

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 36 r.p.m.

Features

- Power ratings up to 100 hp
- Vertical 3 cylinder design

Technical details HAMPRO® 70

Operating pressure	Flow rate
up to 50.7k psi	up to 53 gpm
Design	Weight
Vertical 3 cylinder design	~ 474 lbs

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® 70: Performance parameters (standard design)

HAM PRO®	Q** [gpm]	Required power rating [hp]			D [mm]	r.p.m.	
		40	60	100		n1	n2
		Operating pressure [psi]					
74	1.27	38436	50764		12	960/1123	*470
	1.90	29008	43512			1500	625
	2.91	20306	30458	43512		1800/2150	900
	2.22	24657	34810		15	960/1123	*470
	3.14	18130	27558			1500	625
	4.54	12909	18855	29733		1800/2150	900
	3.12	18130	25382		17,5	960/1123	*470
	4.49	13489	20306			1500	625
	6.08	9428	14214	21756		1800/2150	900

73	4.23	13779	19580		20	960/1123	*470
	5.55	10298	15229			1500	625
	6.87	8702	13054	19580		1500/1800	750

72	5.0	10878	15954		22	960/1123	*470
	6.9	8702	13054	16390		1500	625
	8.5	7252	10878	16390		1500/1800	750
	6.1	9428	13779		24	960/1123	*470
	8.5	7252	10878	13779		1500	625
	10.0	6092	9138	13779		1500/1800	750
	7.1	8267	11603		26	960/1123	*470
	10.0	6237	9283	11748		1500	625
	11.9	5076	7687	11748		1500/1800	750
	9.8	6092	8702		30	960/1123	*470
	13.2	4641	6962			1500	625
	15.6	3771	5802	8702		1500/1800	750
	13.5	4496	6382		35	960/1123	*470
	18.2	3336	5076			1500	625
	21.4	2756	4206	6382		1500/1800	750
	18.0	3481	4931		40	960/1123	*470
	24.0	2611	3916			1500	625
	28.3	2176	3191	4931		1500/1800	750
	22.7	2756	3916		45	960/1123	*470
	30.4	2031	3046			1500	625
	35.7	1595	2466	3916		1500/1800	750
	28	2176	3046		50	960/1123	*470
	38	1595	2466			1500	625
	44	1305	2031	3046		1500/1800	750
	34	1740	2611		55	960/1123	*470
	45	1305	2031			1500	625
	53	870	1450	2176		1500/1800	750

Data

- Rod force: 9,667 lbf
- Stroke: 1.6 inch
- Mean plunger speed at n2:

470 r.p.m. = 2.1 ft/sec

625 r.p.m. = 2.8 ft/sec

750 r.p.m. = 3.3 ft/sec

900 r.p.m. = 3.9 ft/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.