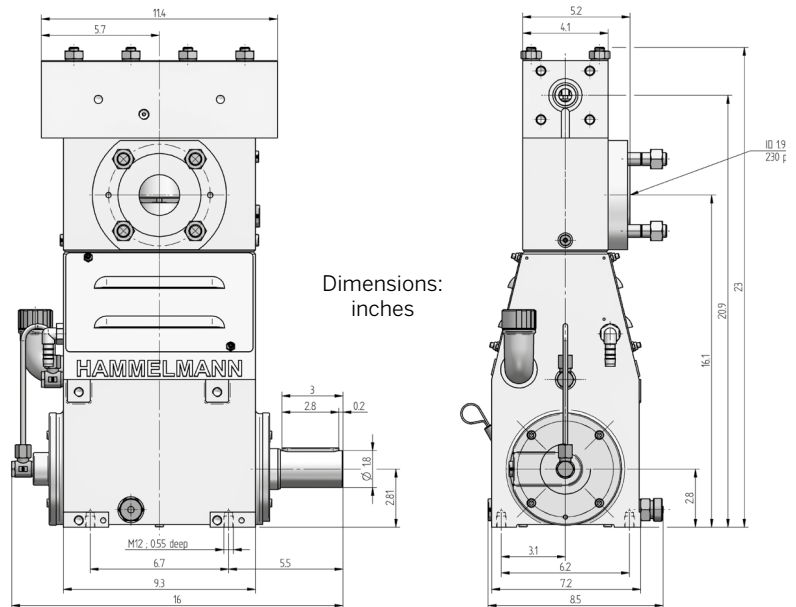


HAMPRO® 20 Process plunger pump

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.



Technical details HAMPRO® 20

Operating pressure	Flow rate	Design	Weight
up to 55.1k psi	up to 27.2 gpm	Vertical 3 cylinder design	~ 209 lbs

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

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
- Bellows form hermetic seal between the suction chamber and crank section
- Large selection of materials available for different fluids
- Minimum crankshaft speed with external oil pump 50 r.p.m.

Features

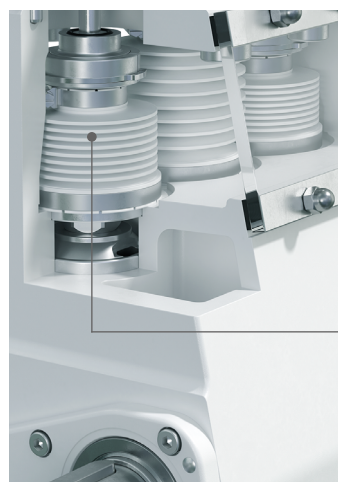
- Power ratings up to 25 hp
- Vertical 3 cylinder design

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.



The bellow system is gastight.

Technical data, series HAMPRO® 20: Performance parameters (standard design)

HAM PRO®	Q** [gpm]	Required power rating [hp]			D [mm]	r.p.m.	
		15	20	25		n1	n2
		Operating pressure [psi]					
24	0.50	40611	50764		8	1401/1681	*490
	0.58	31909	43512	55115		1500/1800	625
	0.85	22481	15229	22481		1500/1800	900
	0.82	26107	31909		10	1401/1681	*490
	0.92	20306	27558	32634		1500/1800	625
	1.35	14214	19580	23932		1500/1800	900

Data

- Rod force: 3,957 lbf
- Stroke: 1.2 inch
- Mean plunger speed at n2:

490 r.p.m. = 1.6 ft/sec
 625 r.p.m. = 2.1 ft/sec
 750 r.p.m. = 2.5 ft/sec
 900 r.p.m. = 3.0 ft/sec

23	0.82	26107	31909		10	1401/1681	*490
	0.92	20306	26107			1500/1800	625
	1.11	14214	19580			1500/1800	750
	1.22	18130	22481		12	1401/1681	*490
	1.85	14069	18855	22481		1500/1800	625
	2.11	10008	13489	16680		1500/1800	750

Certificates

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

22	1.85	11603	13779		15	1401/1681	*490
	2.38	8992	12328	14504		1500/1800	625
	2.91	7687	10443	12764		1500/1800	750
	2.64	8557	10588		17.5	1401/1681	*490
	3.17	6672	8992	10588		1500/1800	625
	3.96	5512	7542	9283		1500/1800	750
	3.43	6527	8122		20	1401/1681	*490
	4.23	5076	6962	8122		1500/1800	625
	5.28	4206	5802	7107		1500/1800	750
	5.3	4061	5076		25	1401/1681	*490
	6.6	3191	4351	5221		1500/1800	625
	8.2	2756	3626	4496		1500/1800	750
	7.9	2901	3481		30	1401/1681	*490
	10.0	2176	3046	3626		1500/1800	625
	11.9	1886	2611	3191		1500/1800	750
	12.7	2031	2611		35	1401/1681	*490
	13.5	1668	2176	2611		1500/1800	625
	16.4	1378	1886	2321		1500/1800	750
	16.6	1595	2031		40	1401/1681	*490
	18.0	1233	1740	2031		1500/1800	625
	21.7	1088	1450	1740		1500/1800	750
	21.1	1233	1595		45	1401/1681	*490
	22.7	1015	1378	1595		1500/1800	625
	27.2	798	1088	1378		1500/1800	750

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.