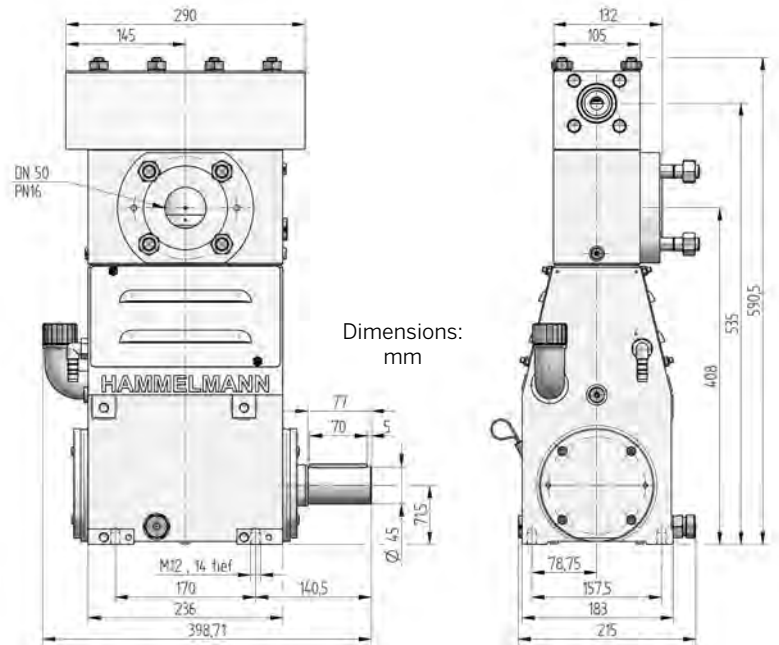


HAMPRO® 10 Process plunger pump



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.



Technical details HAMPRO® 10

Operating pressure	Flow rate	Design	Weight
up to 2300 bar	up to 6,2 m ³ /h	Vertical 3 cylinder design	~ 94 kg

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: 37 r.p.m.

Features

- Power ratings up to 11 kW
- 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.

HAMELMANN®

Technical data, series HAMPRO® 10: Performance parameters (standard design)

HAM PRO®	Q** [l/min]	Q** [m³/h]	Required power rating [kW]			D [mm]	r.p.m.	
			5,5	7,5	11		n1	n2
			Operating pressure [bar]					
14	1,9	0,11	1400	1900	2300	8	1401/1681	*490
	2,2	0,13	900	1250	1850		1500/1800	625
	3,2	0,19	770	1050	1550		1500/1800	900
	3,1	0,19	900	1200	1450	10	1401/1681	*490
	3,5	0,21	570	780	1150		1500/1800	625
	5,1	0,31	490	660	980		1500/1800	900

Data

- Rod force: 11,7 kN
- Stroke: 30 mm
- Mean plunger speed at n2:

490 r.p.m. = 0,49 m/sec

625 r.p.m. = 0,63 m/sec

750 r.p.m. = 0,75 m/sec

900 r.p.m. = 0,90 m/sec

13	3,1	0,19	900	1200	1450	10	1401/1681	*490
	3,5	0,21	570	780	1150		1500/1800	625
	4,2	0,25	490	660	980		1500/1800	750
	4,6	0,28	600	850	1000	12	1401/1681	*490
	7	0,42	400	550	810		1500/1800	625
	8	0,48	350	480	710		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

12	7	0,42	400	540	660	15	1401/1681	*490
	9	0,54	310	420	630		1500/1800	625
	11	0,66	260	350	520		1500/1800	750
	10	0,60	290	400	480	17,5	1401/1681	*490
	12	0,72	220	300	450		1500/1800	625
	15	0,90	190	250	380		1500/1800	750
	13	0,78	220	300	370	20	1401/1681	*490
	16	0,96	170	230	350		1500/1800	625
	20	1,20	145	190	290		1500/1800	750
	20	1,20	140	190	230	25	1401/1681	*490
	25	1,50	110	150	220		1500/1800	625
	31	1,86	95	130	190		1500/1800	750
	30	1,8	100	135	165	30	1401/1681	*490
	38	2,3	75	105	155		1500/1800	625
	45	2,7	65	85	130		1500/1800	750
	48	2,9	60	85	120	35	1401/1681	*490
	51	3,1	55	75	115		1500/1800	625
	62	3,7	45	65	95		1500/1800	750
	63	3,8	45	65	90	40	1401/1681	*490
	68	4,1	40	55	85		1500/1800	625
82	4,9	35	50	75	1500/1800		750	
80	4,8	35	50	70	45	1401/1681	*490	
86	5,2	35	45	70		1500/1800	625	
103	6,2	25	35	55		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.