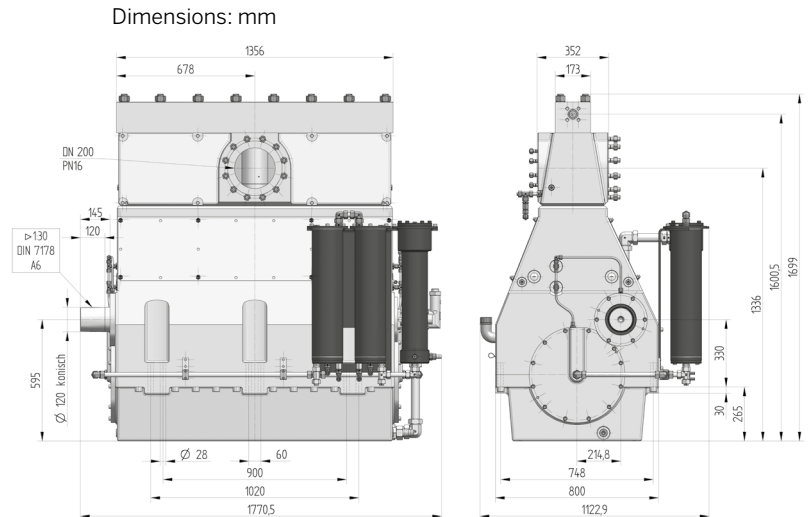
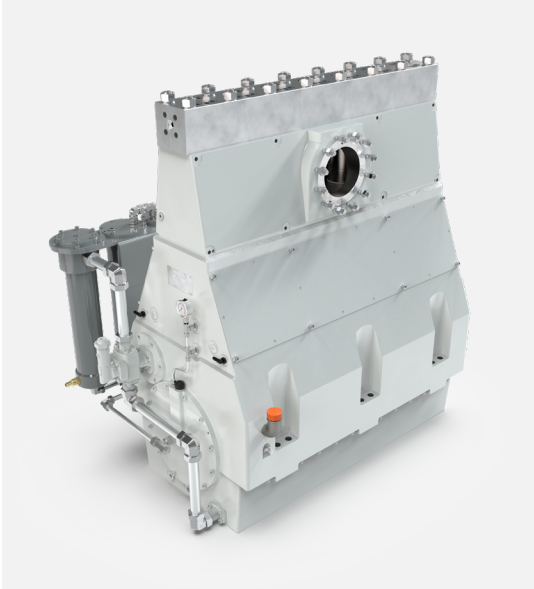


HAMPRO® MC Process plunger pump



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 50 r.p.m.

Features

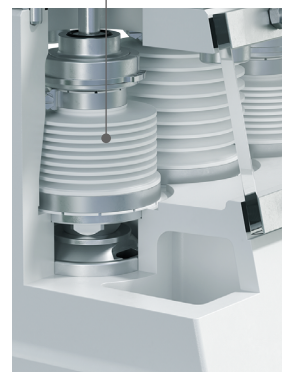
- Power ratings up to 1150 kW
- Vertical 7 cylinder design

Technical details HAMPRO® MC

Operating pressure	Flow rate
up to 3000 bar	up to 179 m ³ /h
Design	Weight
Vertical 7 cylinder design	~ 5361 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



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® MC: Performance parameters (standard design)

HAM PRO®	Q** [l/min]	Q** [m³/h]	Required power rating [kW]			D [mm]	r.p.m.	
			710	900	1150		n1	n2
			Operating pressure [bar]					
MC4	126	7,6	3000			28	1500	320
	121	7,3	2600	3000			1368/1628	*350
	178	10,7	2100	2700			1857	475
	162	9,7	2240	2600		32	1500	320
	166	10,0	2050	2600			1368/1628	*350
	240	14,4	1560	1980	2420		1857	475
	198	11,9	1850			35	1500	320
	204	12,2	1700	2150			1368/1628	*350
288	17,3	1300	1650	2100	1857		475	

MC3	267	16,0	1450	1650		40	1500	320
	272	16,3	1300	1650			1368/1628	*350
	384	23,0	990	1250	1570		1857	475
	338	20,3	1150	1320		45	1500	320
	350	21,0	1000	1320			1368/1628	*350
	487	29,2	780	990	1250		1857	475

MC2	422	25,3	930	1070		50	1500	320
	437	26,2	830	1060			1368/1628	*350
	607	36,4	630	800	1000		1857	475
	505	30	770	880		55	1500	320
	536	32	690	880			1368/1628	*350
	727	44	520	660	830		1857	475
	601	36	640	740		60	1500	320
	644	39	580	740			1368/1628	*350
	879	53	440	560	700		1857	475
	713	43	550	630		65	1500	320
	762	46	490	630			1368/1628	*350
	1043	63	370	470	600		1857	475
	827	50	470	540		70	1500	320
	890	53	420	540			1368/1628	*350
	1210	73	320	410	520		1857	475
	950	57	410	470		75	1500	320
	1026	62	370	470			1368/1628	*350
	1395	83	280	360	450		1857	475
	1047	63	360			80	1500	320
	1178	71	320	410			1368/1628	*350
1565	92	240	310	390	1857		475	

MC1 High flow	1047	63	360			80	1500	320
	1178	71	320	410			1368/1628	*350
	1565	92	240	310	390		1857	475
	1182	71	320	370		85	1500	320
	1328	80	250	370			1368/1628	*350
	1775	104	220	280	350		1857	475
	1339	80	280	330		90	1500	320
	1493	90	250	330			1368/1628	*350
	2000	117	190	250	310		1857	475
	1671	100	230			100	1500	320
	1856	111	210	260			1368/1628	*350
	2486	147	160	200	250		1857	475
	2042	123	190	220		110	1500	320
	2248	135	170	220			1368/1628	*350
	3024	179	130	165	210		1857	475

Data

- Rod force: 210 kN
- Stroke: 100 mm
- Mean plunger speed at n2:

320 r.p.m. = 1,06 m/sec

350 r.p.m. = 1,17 m/sec

475 r.p.m. = 1,58 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



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.