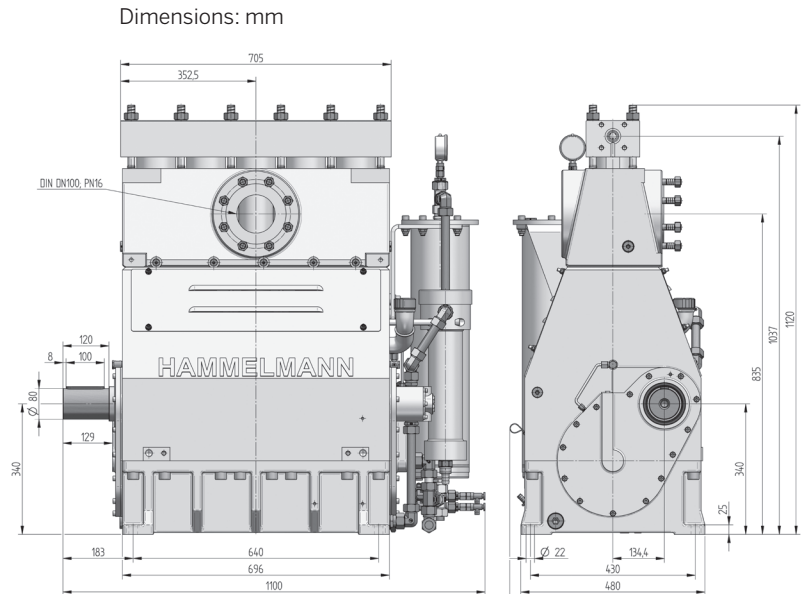


HAMPRO® 340 Process plunger pump

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 32 r.p.m.

Features

- Power ratings up to 340 kW [460 hp]
- Vertical 5 cylinder design

Technical details HAMPRO® 340

Operating pressure	Flow rate
up to 46k psi	up to 2260 cft/h
Design	Weight
5 cylinders, vertical	~ 2360 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® 340: Performance parameters (standard design)

HDP	Q** [gpm]	Q** [cft/h]	Required power rating [kW]						D [mm]	r.p.m.	
			110	132	200	250	300	340		n1	n2
			Operating pressure [bar]								

344	8.7	69.9	24.7k	29k	45k	-	-	-	17.5	1500	411
	10.6	84.8	20.5k	24.7k	37.7k	46.4k	-	-		1500 / 1800	493
	12.4	99.6	17.1k	20.5k	30.5k	39.2k	46.4k	-		1800 / 2150	591
	10.6	84.8	20.3k	24.2k	36.3k	43.5k	-	-	19.3	1500	411
	12.7	101.7	16.8k	20.3k	30.5k	37.7k	43.5k	-		1500 / 1800	493
	15.3	122.9	14.1k	16.8k	25.5k	31.9k	37.7k	43.5k		1800 / 2150	591
	11.4	91.1	18.9k	22.5k	34.8k	40.6k	-	-	20	1500	411
	13.5	108.1	15.7k	18.9k	28.4k	36.3k	40.6k	-		1500 / 1800	493
	16.1	129.3	13.1k	15.7k	23.8k	30.5k	36.3k	40.6k		1800 / 2150	591

343	19.0	152.6	12k	14.5k	21.9k	26.1k	-	-	25	1500	411
	22.7	182.2	10.2k	12k	18.3k	22.8k	26.1k	-		1500 / 1800	493
	27.2	218.2	8.4k	10.2k	15.2k	19k	22.8k	25.8k		1800 / 2150	591
	23.5	188.6	9.6k	11.6k	17.4k	20.7k	-	-	28	1500	411
	28.3	226.7	8k	9.6k	14.5k	18.1k	20.7k	-		1500 / 1800	493
	33.8	271.2	6.7k	8k	12.2k	15.1k	18.1k	20.6k		1800 / 2150	591

342	26.7	214.0	8.4k	10.2k	15.2k	18k	-	-	30	1500	411
	32.2	258.5	7k	8.4k	12.6k	16k	18k	-		1500 / 1800	493
	38.6	309.4	5.8k	7k	10.6k	13.2k	16k	18k		1800 / 2150	591
	33.5	269.1	7k	8.3k	12.5k	14.9k	-	-	33	1500	411
	40.2	322.1	5.8k	7k	10.4k	13.1k	14.9k	-		1500 / 1800	493
	48.1	385.6	4.8k	5.8k	8.7k	10.9k	13.1k	14.8k		1800 / 2150	591
	36.7	294.5	6.1k	7.4k	11.2k	13.2k	-	-	35	1500	411
	44.1	353.9	5.1k	6.1k	9.3k	11.6k	13.2k	-		1500 / 1800	493
	52.8	423.8	4.4k	5.1k	7.7k	9.7k	11.6k	13.2k		1800 / 2150	591
	48.6	389.9	4.6k	5.8k	8.7k	10.2k	-	-	40	1500	411
	58.4	468.3	3.9k	4.6k	7.3k	8.8k	10.2k	-		1500 / 1800	493
	70.0	561.5	3.3k	3.9k	5.9k	7.4k	8.8k	10.2k		1800 / 2150	591
	62.1	497.9	3.8k	4.5k	6.8k	8k	-	-	45	1500	411
	74.5	597.5	3k	3.8k	5.8k	7k	8k	-		1500 / 1800	493
	89.3	716.2	2.6k	3k	4.6k	5.8k	7.3k	8k		1800 / 2150	591
	77.7	623.0	3k	3.6k	5.5k	6.5k	-	-	50	1500	411
	93.0	745.8	2.5k	3k	4.5k	5.8k	6.5k	-		1500 / 1800	493
	111.5	894.2	2k	2.5k	3.8k	4.8k	5.8k	6.5k		1800 / 2150	591
	93.8	752.2	2.5k	3k	4.5k	5.4k	-	-	55	1500	411
	112.5	902.6	2k	2.5k	3.8k	4.6k	5.4k	-		1500 / 1800	493
	135.0	1082.7	1.7k	2k	3.2k	3.9k	4.6k	5.4k		1800 / 2150	591
	110.4	885.7	2k	2.5k	3.8k	4.5k	-	-	60	1500	411
	132.6	1063.7	1.7k	2k	3.2k	3.9k	4.5k	-		1500 / 1800	493
	159.0	1275.6	1.5k	1.7k	2.6k	3.3k	3.9k	4.5k		1800 / 2150	591
	129.7	1040.4	1.7k	2.2k	3.2k	3.9k	-	-	65	1500	411
	155.6	1248.0	1.5k	1.7k	2.9k	3.3k	3.9k	-		1500 / 1800	493
	186.5	1495.9	1.5k	1.5k	2.3k	2.9k	3.3k	3.8k		1800 / 2150	591
	150.3	1205.6	1.6k	1.9k	2.9k	3.3k	-	-	70	1500	411
	180.4	1447.2	1.5k	1.6k	2.3k	2.9k	3.3k	-		1500 / 1800	493
	216.4	1735.4	1k	1.5k	1.9k	2.5k	2.9k	3.3k		1800 / 2150	591
	196.5	1576.4	1.2k	1.5k	2.2k	2.6k	-	-	80	1500	411
	235.6	1890.0	1k	1.2k	1.7k	2.2k	2.6k	-		1500 / 1800	493
	282.4	2265.1	0.9k	1k	1.5k	1.9k	2.2k	2.5k		1800 / 2150	591

Data

- Rod force: 88 kN
- Stroke: 75 mm
- Mean plunger speed at n2:

400 1/min. = 1,00 m/sec

493 1/min. = 1,23 m/sec

591 1/min. = 1,48 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
- 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.