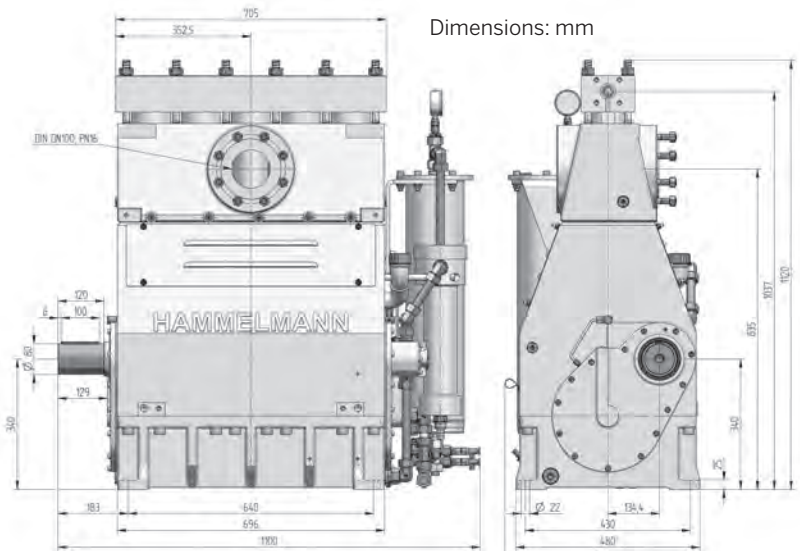


HAMPRO® 300 Process plunger pump



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 32 r.p.m.

Features

- Power ratings up to 300 kW
- Vertical 5 cylinder design

Technical details HAMPRO® 300

| Operating pressure | Flow rate |
|----------------------------|----------------------------|
| up to 3200 bar | up to 64 m ³ /h |
| Design | Weight |
| Vertical 5 cylinder design | ~ 1070 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.

Technical data, series HAMPRO® 300: Performance parameters (standard design)

| HAM PRO® | Q** [l/min] | Q** [m³/h] | Required power rating [kW] | | | | D [mm] | r.p.m. | |
|----------|-------------|------------|----------------------------|------|------|-----------|--------|-----------|------|
| | | | 110 | 160 | 200 | 300 | | n1 | n2 |
| | | | Operating pressure [bar] | | | | | | |
| 304 | 21 | 1,26 | 2350 | 3200 | | | 15 | 1216/1460 | *400 |
| | 26 | 1,56 | 1900 | 2750 | 3200 | | | 1500/1800 | 493 |
| | 30 | 1,80 | 1600 | 2300 | 2900 | | | 1800/2150 | 591 |
| | 29 | 1,7 | 1700 | 2500 | 3150 | | 17,5 | 1216/1460 | *400 |
| | 39 | 2,3 | 1350 | 1950 | 2500 | | | 1500/1800 | 493 |
| | 47 | 2,8 | 1150 | 1650 | 2300 | 3200 | | 1800/2150 | 591 |
| | 40 | 2,4 | 1300 | 1900 | 2400 | | 20 | 1216/1460 | *400 |
| | 51 | 3,1 | 1050 | 1500 | 1900 | 2800 | | 1500/1800 | 493 |
| 62 | 3,7 | 900 | 1300 | 1600 | 2450 | 1800/2150 | | 591 | |

| | | | | | | | | | |
|-----|-----|-----|-----|------|------|------|----|-----------|------|
| 303 | 65 | 3,9 | 850 | 1230 | 1540 | | 25 | 1216/1460 | *400 |
| | 86 | 5,2 | 670 | 970 | 1220 | 1800 | | 1500/1800 | 493 |
| | 101 | 6,1 | 560 | 810 | 1020 | 1600 | | 1800/2150 | 591 |
| | 84 | 5,0 | 670 | 980 | 1230 | | 28 | 1216/1460 | *400 |
| | 107 | 6,4 | 530 | 780 | 970 | 1430 | | 1500/1800 | 493 |
| | 126 | 7,6 | 450 | 650 | 810 | 1300 | | 1800/2150 | 591 |

| | | | | | | | | | |
|------|-----|------|-----|-----|------|------|-----------|-----------|------|
| 302 | 97 | 5,8 | 590 | 860 | 1070 | | 30 | 1216/1460 | *400 |
| | 122 | 7,3 | 460 | 670 | 840 | 1240 | | 1500/1800 | 493 |
| | 145 | 8,7 | 390 | 570 | 710 | 1100 | | 1800/2150 | 591 |
| | 112 | 6,7 | 510 | 750 | 940 | | 32 | 1216/1460 | *400 |
| | 139 | 8,3 | 410 | 590 | 740 | 1090 | | 1500/1800 | 493 |
| | 166 | 10,0 | 340 | 500 | 620 | 980 | | 1800/2150 | 591 |
| | 135 | 8,1 | 430 | 630 | 780 | | 35 | 1216/1460 | *400 |
| | 167 | 10,0 | 340 | 500 | 620 | 910 | | 1500/1800 | 493 |
| | 200 | 12,0 | 290 | 420 | 520 | 800 | | 1800/2150 | 591 |
| | 178 | 10,7 | 330 | 480 | 600 | | 40 | 1216/1460 | *400 |
| | 221 | 13,3 | 260 | 380 | 470 | 700 | | 1500/1800 | 493 |
| | 264 | 15,8 | 220 | 320 | 400 | 620 | | 1800/2150 | 591 |
| | 227 | 13,6 | 260 | 380 | 470 | | 45 | 1216/1460 | *400 |
| | 282 | 16,9 | 210 | 300 | 380 | 550 | | 1500/1800 | 493 |
| | 337 | 20,2 | 170 | 250 | 310 | 480 | | 1800/2150 | 591 |
| | 283 | 17,0 | 210 | 300 | 380 | | 50 | 1216/1460 | *400 |
| | 352 | 21,1 | 170 | 240 | 300 | 450 | | 1500/1800 | 493 |
| | 421 | 25,3 | 140 | 200 | 250 | 380 | | 1800/2150 | 591 |
| | 343 | 20,6 | 175 | 250 | 310 | | 55 | 1216/1460 | *400 |
| | 426 | 25,6 | 140 | 200 | 250 | 370 | | 1500/1800 | 493 |
| | 509 | 30,5 | 120 | 170 | 210 | 320 | | 1800/2150 | 591 |
| | 410 | 24,6 | 145 | 210 | 260 | | 60 | 1216/1460 | *400 |
| | 502 | 30,1 | 120 | 170 | 210 | 310 | | 1500/1800 | 493 |
| | 600 | 36,0 | 100 | 140 | 180 | 270 | | 1800/2150 | 591 |
| | 482 | 29 | 125 | 180 | 220 | | 65 | 1216/1460 | *400 |
| | 589 | 35 | 100 | 140 | 180 | 260 | | 1500/1800 | 493 |
| | 709 | 43 | 80 | 120 | 150 | 230 | | 1800/2150 | 591 |
| | 560 | 34 | 105 | 155 | 195 | | 70 | 1216/1460 | *400 |
| | 683 | 41 | 90 | 120 | 160 | 230 | | 1500/1800 | 493 |
| | 818 | 49 | 70 | 100 | 130 | 200 | | 1800/2150 | 591 |
| 733 | 44 | 80 | 120 | 150 | | 80 | 1216/1460 | *400 | |
| 892 | 54 | 65 | 95 | 120 | 170 | | 1500/1800 | 493 | |
| 1069 | 64 | 55 | 80 | 100 | 150 | | 1800/2150 | 591 | |

Data

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

400 r.p.m. = 1,00 m/sec

493 r.p.m. = 1,23 m/sec

591 r.p.m. = 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
- 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.