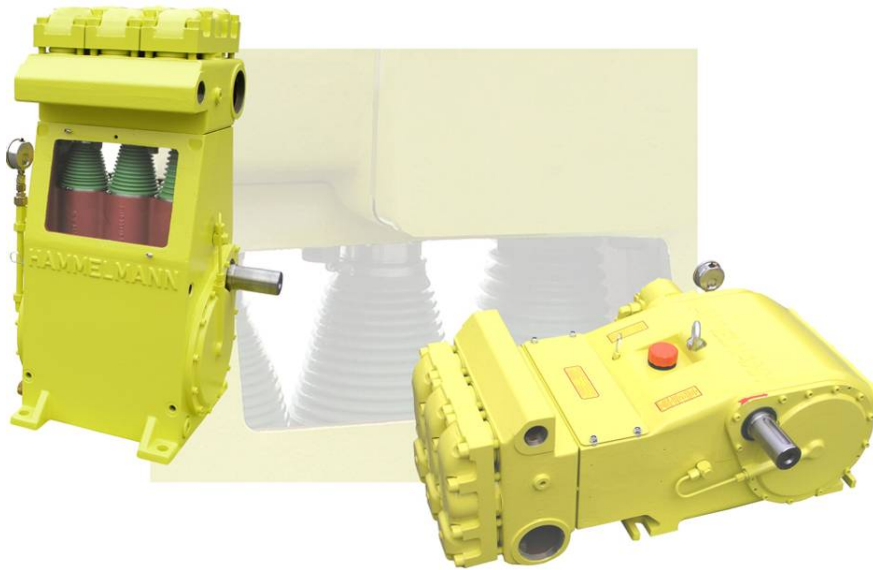


# HDP 146 High pressure high flow pump



## Compact design

- Optimum space utilisation
- Integral reduction gear

## Adaptability provides installation options

- Horizontal or vertical models
- Reversible pump head
- Central or side suction connection
- Discharge connections on both sides
- Left or right hand drive shaft
- Can operate at higher inclinations

## Water end: suitable for recycled water

Less wear due to :

- High grade solid ceramic plungers
- Wear resistant valve seats
- Low flow velocity over suction and discharge valves
- Packing seal sets within rust resistant stainless steel sleeves
- Slow plunger speed

## Drive end

- Hammelmann standard industrial drive end specifically designed for continuous duty
- Pressurised oil lubrication system
- High quality spheroidal cast iron housing
- Clockwise or anticlockwise rotation

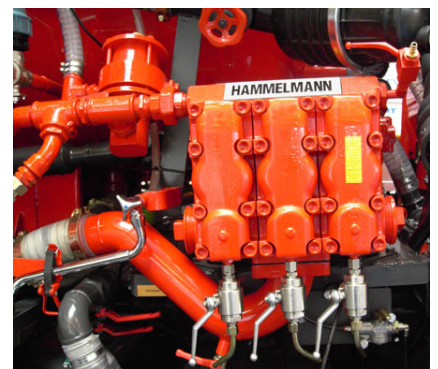
## Easy servicing

- Reversible valve seats
- Suction and discharge valves use identical components
- Maintenance possible without removal of suction and pressure lines
- All service access front/above
- Fixed valve housing accessible via light weight cover plates

## Environmentally friendly

- Quiet drive end due to twin helical gears
- Piston rods hermetically sealed by the NBR bellows, no oil leakage

## Installations



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## Technical data

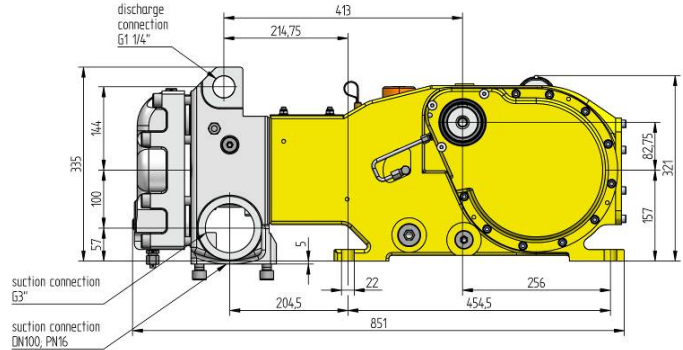
### HDP 146

- Rod force: 66,420 lbf
- Stroke: 2.17 in.
- Mean piston speed at  $n_2$   
 440 r.p.m. = 2.7 feet/sec  
 525 r.p.m. = 3.1 feet/sec  
 580 r.p.m. = 3.5 feet/sec

| [GPM] | Pressure [psig] | Power required [HP] | Piston $\varnothing$ | $n_1$ [r.p.m.] | $n_2$ [r.p.m.] |
|-------|-----------------|---------------------|----------------------|----------------|----------------|
| 71.3  | 3300            | 150                 | 70                   | 1250/1500/1800 | 440            |
| 85.8  | 3300            | 180                 | 70                   | 1500/1800/2150 | 525            |
| 94.2  | 3000            | 180                 | 70                   | 1650           | 580            |
| 81.6  | 2900            | 150                 | 75                   | 1250/1500/1800 | 440            |
| 97.7  | 2900            | 180                 | 75                   | 1500/1800/2150 | 525            |
| 107.4 | 2600            | 180                 | 75                   | 1650           | 580            |
| 92.9  | 2500            | 150                 | 80                   | 1250/1500/1800 | 440            |
| 110.9 | 2500            | 180                 | 80                   | 1500/1800/2150 | 525            |
| 122.0 | 2300            | 180                 | 80                   | 1650           | 580            |

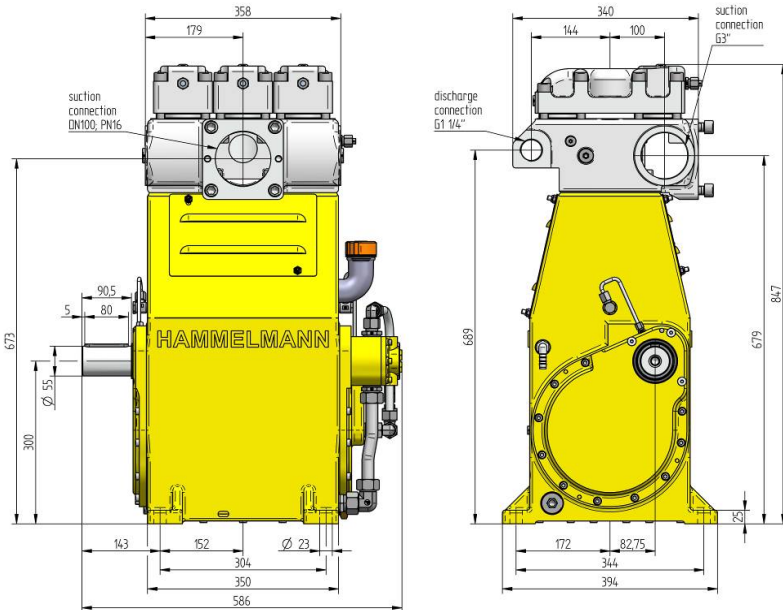
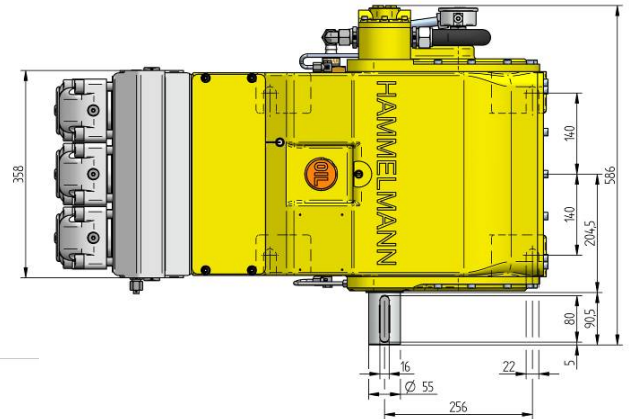
## Technical details

|                           |   |
|---------------------------|---|
| Design                    | Horizontal, vertical, 3 cylinder          |
| Plungers                  | Solid ceramic                             |
| Plunger sealing           | Triple packing rings                      |
| Crank section sealing     | Bellows                                   |
| Valves                    | With ancillary sealing for recycled water |
| Valves                    | Reversible                                |
| Crank section lubrication | Pressurised circulating                   |
| Crankshaft bearings       | 2 x roller                                |
| Drive shaft               | Right or left                             |



## Installation data

|                           |                             |
|---------------------------|-----------------------------|
| Weight                    | Approx. 770 lbs             |
| Mounting points           | 4 x M20                     |
| Mounting hole pattern     |                             |
| HDP 146 horizontal        | 18" x 11"                   |
| HDP 146 vertical          | 13.5" x 12"                 |
| Drive shaft               | 2" dia. x 3.7"              |
| Shaft key                 | DIN 6885 – A                |
| Permissible lateral force | 8.850 lbf                   |
| Discharge connection      | G 1 1/4" female             |
| Suction connection        | 4" i/d,<br>PN87 DIN 2 x 3 " |



Horizontal design



Vertical design

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