

# High-pressure pump 330ARP

The type 330ARP high-pressure pump provides a max. operating pressure of 340 bar and a max. flow rate of 537 l/min.



The ARP-series has operating pressures up to 400 bar and nominal flow rates up to approx. 1,680 l/min.

A special feature of this series is the high reliability also in the conveying of media contaminated with granular or fibrous solids up to a solids concentration of 3,000 mg/l and a grain size of up to 300 µm. This series is particularly suitable for sewer and pipe cleaning as well as descaling in the steel industry. The pump head of the ARP series consists of robust stainless steel (see figure); on request, the use of super duplex steels can also be tested for maximum resistance (deviation of the technical data, if applicable).

On request, the availability of an ATEX version can be checked.

| Technical data  |                   |  |
|---|-------------------|--|
| Weight  | approx.           | 998 kg   |
| Inlet pressure connection                                   |                   | 3,000 psi SAE 4" hole pattern M16; 130.2x77.8                          |
| Pressure connection   |                   | 6,000 psi SAE 2" hole pattern M20; 96.8x44.4                           |
| Cooling water connection                                    |                   | G ½"   |
| Crankshaft  | max.<br>min.      | 426 1/min<br>Depends on operation parameters                           |
| Drive shaft   |                   | Diameter 70mm k6,<br>feather key DIN 6885 Sheet 1, A20 x 12 x 100      |
| Torque at drive shaft                                       | max.              | 1,267 Nm   |
| Moment of inertia J   |                   | 0.114 kgm <sup>2</sup>   |
| Centrifugal moment GD <sup>2</sup>                          |                   | 4.45 Nm <sup>2</sup>   |
| Inlet pressure  | min.<br>max.      | 1.5 bar<br>5.0 bar   |
| Pressure amplitude  | max.              | ± 2.0 bar  |
| Flow temperature  | min.<br>max.      | +5 °C<br>+45 °C (higher temperatures on request)                       |
| Flow inlet requirement                                      | min.              | 1.5x nominal feed rate of the pump,<br>dependent on the conversion set |
| Emission sound pressure level according to DIN EN ISO 11200 |                   | >80 dB(A)  |
| Oil capacity of transmission end                            | approx.           | 30 l   |
| Oil viscosity ISO VG under DIN 51517-2 or -3                |                   | 320 mm <sup>2</sup> /s   |
| Oil pressure lubrication                                    |                   | 2.5 - 5.0 bar  |
| Oil pressure set value overflow valve                       |                   | 5.0 bar  |
| Oil filter fineness   |                   | 0.025 mm   |
| Oil temperature   | max.<br>Set value | 80 °C<br>60 - 70 °C  |
| Heat exchanger cooling water requirement                    | appr.             | 10 - 20 l/min  |
| Heat exchanger cooling water temperature                    | min.<br>max.      | +5 °C<br>+45 °C  |
| Heat exchanger cooling water pressure                       | min.<br>max.      | 1.5 bar<br>10 bar  |

| Performance variants** |                  |             |          |         |         |         |
|------------------------|------------------|-------------|----------|---------|---------|---------|
| Pinion shaft           |                  | Crank shaft | P55      |         | P65     |         |
| 1,500<br>[1/min]       | 1,800<br>[1/min] |             | 340 bar* |         | 240 bar |         |
| Gear ratio             |                  | [1/min]     | [kW]     | [l/min] | [kW]    | [l/min] |
|                        | 4.23             | 426*        | 240*     | 380     | 239     | 537*    |
| 4.23                   |                  | 355         | 200      | 317     | 200     | 447     |

\* Maximum values of the pump

\*\* Technical changes reserved

# Overview pump 330ARP

