

Alfa Laval - Pump Applications General Guidelines

The table shown below gives a general guide as to the various types of Alfa Laval pump that may be required to suit the application.

| General Requirements | Centrifugal | Liquid Ring | Rotary Lobe |
|---------------------------------------------------------------------------|-----------------|-----------------|---------------|
| Product/Fluid Requirements | | | |
| Max. Viscosity | 1000 cP | 200 cP | 1000000 cP |
| Max. Pumping Temperature | 140°C (284°F) | 140°C (284°F) | 200°C (392°F) |
| Min. Pumping Temperature | - 10°C (14°F) | - 10°C (14°F) | - 20°C (-4°F) |
| Ability to pump abrasive products | Not recommended | Not recommended | Fair |
| Ability to pump fluids containing air or gases | Not recommended | Recommended | Fair |
| Ability to pump shear sensitive media | Fair | Not recommended | Recommended |
| Ability to pump solids in suspension | Fair | Not recommended | Recommended |
| CIP capability (sanitary) | Recommended | Recommended | Recommended |
| Dry running capability (when fitted with flushed/quench mechanical seals) | Recommended | Recommended | Recommended |
| Self Draining capability | Recommended | Recommended | Recommended |
| Performance Requirements | | | |
| Max. Capacity - m ³ /hr | 440 | 80 | 115 |
| Max. Capacity - US gall/min | 1936 | 352 | 506 |
| Max. Discharge Pressure - bar | 20 | 5.5 | 20 |
| Max. Discharge Pressure - psig | 290 | 80 | 290 |
| Ability to vary flow rate | Fair | Not recommended | Recommended |
| Suction Lift capability (primed wet) | Recommended | Recommended | Recommended |
| Suction Lift capability (unprimed - dry) | Not recommended | Not recommended | Fair |
| Drive Availability | | | |
| Air motor | No | No | Yes |
| Diesel engine | No | No | Yes |
| Electric motor | Yes | Yes | Yes |
| Hydraulic motor | Possible | Possible | Yes |
| Petrol engine | No | No | Yes |
| Compliance with International Standards and Guidelines | | | |
| 3-A | Yes | Yes | Yes |
| FDA | Yes | Yes | Yes |
| EHEDG | Yes | No | Yes |