

ROTOR CLEARANCES

How to Select Rotor Clearances:

“Standard clearance rotors may be used with liquid temperatures up to 200F degrees. However, between 180F-200F consider other application factors such as: *speed of operation, *differential pressure, *lubricating properties of liquid being pumped. If these factors trend toward a difficult application (high speed, high pressure, non-lubricating) then “FF” or “Hot” clearance rotors are recommended.

“FF” (Front Face) clearance rotors provide additional clearance in the front face area only. They are recommended for use with liquid temperature between 180F-220F degrees. They give better pumping efficiency (less slip) than “Hot” clearance rotors when used with low viscosity liquids. However, do not use “FF” rotors if they will be subjected to temperature shock (extreme, rapid temperature change.)

“Hot clearance rotors” are recommended for use with liquid temperatures between 200F-300F. They provide additional clearance in the front face area plus rotor to body areas. Because of this additional clearance there is more slip (inefficiency) with low viscosity liquids, which the pump must overcome with higher operating speed (rpm). VHP (viscous horsepower) is slightly lower when using hot clearance rotors.

“316SS” clearance rotors are used with rotors made from 316 stainless steel material (in place of standard non-galling alloy 88) and recommended for use at temperatures up to 200F degrees. These rotors provide additional clearance all around (more than Hot clearance alloy 88 rotors) to insure no running contact between the 316Ss rotors and other 316SS pump components. Because of this additional clearance there is more slip (inefficiency) with low viscosity liquids, which the pump must overcome with higher operating speed (rpm). VHP (viscous horsepower) is slightly lower when using “316SS” clearance rotors.

“Extra” clearance rotors are another available option. These rotors are recommended for use with products, such as chocolate, which tend to “plate out” and rebuild up on rotor surfaces.

“Single wing rotors” are an available option for certain pump models. They are recommended for applications pumping particulates with minimal damage. These rotors perform the same as standard twin wing rotors. DO NOT USE ABOVE 300 RPM.

Single wing rotors are not available for use with RF (rectangular flange) models.