Trail Gear, Inc

5356 E Pine Ave, Fresno CA 93722 ● Phone: 559-252-4950 ● Fax: 559-251-2665

Maximum pump RPM is 7,000 RPM. Do not drive the pump beyond 7,000 RPMs. If you are using this pump on a custom build, you will need to calculate the correct pump pulley size to ensure you do not exceed 7,000 RPMs on the pump. The formula to calculate this is as follows:

$$RPM_E \times D_E = RPM_P \times D_P$$

Where:

$RPM_E = Maximum\ RPMs\ you\ will\ run\ your\ engine\ at$
$D_E = Diameter\ of\ engine\ crank\ pulley$
$RPM_P = Pump\ RPMs$
$D_P = Diameter\ of\ pump\ pulley$

Example: I have a LS engine I will run up to 6,000 RPM. The crank pulley diameter on the engine is 7-1/2". What diameter pulley do I need to use on my Power Flow™ pump to make sure it doesn't spin faster than 7,000 rpm?

$$Diameter\ of\ pump\ pulley\ D_P = (6{,}000 \times 7.5) \div 7{,}000 = 6.42\ inches$$

Since 6.42" diameter pump pulleys are not readily available, you would need to move to the next largest diameter, which would be 6-1/2".