Series 7800 Pump
Model: 786X-7X01-B604
Flow Range: Open Flow = 1.40-2.35 GPM
At 70 PSI = .97-1.77 GPM

COMPLETING THE PART NUMBER:
786X-7X01-B604
Steel Mounting Plate (Other Types Available)
Desired Shut-off Pressure & Code
A = 30PSI  C = 45PSI  E = 60PSI
B = 40PSI  D = 50PSI  F = 70PSI
70 PSI Pressure Switch Limit (Maximum Flow Components)
Select Pumphead Model From Performance Data Chart
Quick Disconnect Ports for Barb Fittings

SPECIFICATIONS:
- MOTOR:
  TYPE: 115 VAC, 60 HZ, Permanent Magnet, Totally Enclosed, Non-Ventilated
  LEADS: 14 AWG, 12’’ LONG
  TEMP. LIMITS: For User Safety, Optimal Performance, and Maximum Motor Life, This Motor is Equipped with a Thermal Protector that Limits the Motor Shell Temperature to 145°F (63°C), as Shown on the Heat Rise Graph.
  DUTY CYCLE: See Heat Rise Graph

- PUMP DESIGN:
  3 Chamber Diaphragm Pump, Self Priming, Capable of Being Run Dry

- TYPICAL APPLICATION:
  Industrial Grade Water Transfer

- MATERIALS:
  HOUSINGS: Nylon
  VALVES: EPDM
  DIAPHRAGM: Santoprene
  FASTENERS: Stainless Steel

- LIQUID TEMPERATURE:
  170°F (77°C) Max.

- PUMP CERTIFICATIONS:
  NSF Standard 58

- PRIMING CAPABILITIES:

<table>
<thead>
<tr>
<th>PRIME (FEET)</th>
<th>7860</th>
<th>7861</th>
<th>7862</th>
<th>7863</th>
<th>7864</th>
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<tbody>
<tr>
<td>4.5</td>
<td>5.5</td>
<td>6.5</td>
<td>9.5</td>
<td>10</td>
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- FITTINGS:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SHAPE</th>
<th>HOSE BARB SIZE</th>
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<tbody>
<tr>
<td>QUICK DISCONNECT</td>
<td>STRAIGHT</td>
<td>QBS-783 QBS-784</td>
</tr>
<tr>
<td>QUICK DISCONNECT</td>
<td>ELBOW</td>
<td>QBE-783 QBE-784</td>
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WEIGHT: 6 lbs.
The shaded area in both the Performance Data and Heat Rise charts, contains pumps with current levels that are capable of running without periodic cool down. Pumps in this category will generally transfer more water over sustained periods than those in the unshaded areas, which are required to shut down while the motor cools. Some applications require maximum flows at high pressures for relatively short periods, however, so an explanation of thermal protection follows:

1. The Heat Rise graph plots the highest current that can run without ever leaving the Shaded Area, in this case, .80 amps. All pumps with lower operating currents may also run continuously, unless the surrounding air temperature exceeds 70°F (21°C).
2. The other curve shown is the highest flow and pressure model offered, the 7864. At 70 PSI, this pump will flow 1.77 GPM, drawing 1.37 amps.
3. The motor driving all of these pump models has a built in thermal protector that will open, shutting off the pump, when the surface temperature of the motor heats to approximately 145°F. After the initial room temperature heat rise as shown, the model 7864 reaches the shut off temperature after 15 to 20 minutes of run time, pumping about 30 gallons at 70 PSI.
4. Motors of this size and construction require 20 to 40 minutes of cooling time before the thermal protector closes and re-energizes the pump. Lower current levels heat more slowly, allowing longer run times, but the cool down time still averages about 30 minutes, at 70°F ambient temperature.
5. Your application may call for short bursts of water, consuming far less than the 17.5 minutes of sustained operation. Start up current exceeds normal running current, however, so cycling should be limited to 6 times per minute.

**ALL PERFORMANCE AND HEAT RISE FIGURES ARE APPROXIMATE. ACTUAL VALUES WILL VARY WITH AMBIENT CONDITIONS.**