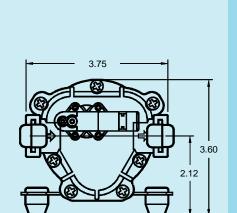
## Series 7800 Pump

Model: 786X-7X01-B524 Flow Range: Open Flow = 1.10-1.90 GPM At 70 PSI = .80-1.40 GPM



## COMPLETING THE PART NUMBER:

786X-7X01-B524

Steel Mounting Plate (Other Types Available)

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.

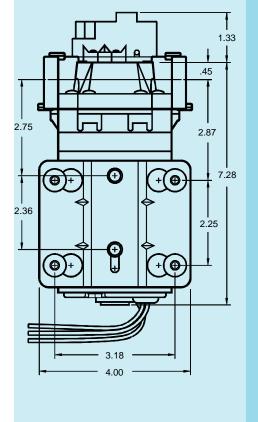
■ PUMP CERTIFICATIONS: NSF Standard 58

**■ PRIMING CAPABILITIES:** 

	7860	7861	7862	7863	7864
PRIME (FEET)	4.5	5.5	8	9.5	10.5

**■** FITTINGS:

		HOSE BARB SIZE		
TYPE	SHAPE	3/8"	1/2"	
QUICK DISCONNECT	STRAIGHT	QBS-783	QBS-784	
QUICK DISCONNECT	ELBOW	QBE-783	QBE-784	



WEIGHT: 6 lbs.



Aquatec International, Inc. 17422 Pullman Street, Irvine, CA 92614 Sales: 949-225-2200 Fax: 949-225-2222 www.aquatec.com

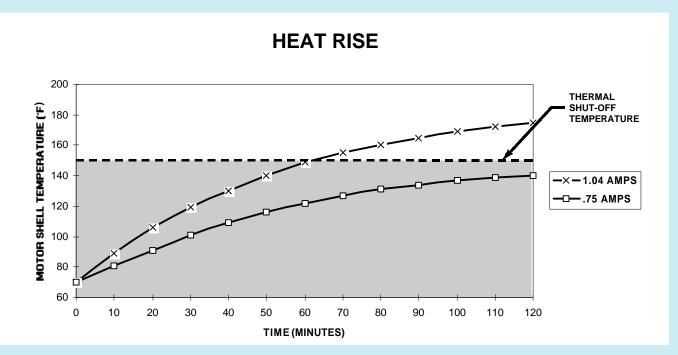
## Series 7800 Pump

Model: 786X-7X01-B524

PERFORMANCE DATA										
DISCHARGE	PUMPHEAD MODEL									
PRESSURE	7860		7861		7862		7863		7864	
(PSI)	FLOW (GPM)	CURRENT (AMPS)	FLOW (GPM)	CURRENT (AMPS)	FLOW (GPM)	CURRENT (AMPS)	FLOW (GPM)	CURRENT (AMPS)	FLOW (GPM)	CURRENT (AMPS)
70	0.80	0.55	0.93	0.66	1.15	0.78	1.30	0.91	1.40	1.04
60	0.85	0.51	0.96	0.61	1.20	0.72	1.36	0.85	1.46	0.97
50	0.89	0.47	1.00	0.56	1.25	0.66	1.42	0.78	1.51	0.89
40	0.92	0.43	1.04	0.51	1.30	0.61	1.48	0.71	1.60	0.80
30	0.96	0.39	1.08	0.46	1.38	0.55	1.52	0.64	1.67	0.72
20	1.00	0.34	1.14	0.41	1.45	0.48	1.58	0.58	1.75	0.65
10	1.07	0.31	1.20	0.38	1.50	0.43	1.65	0.52	1.85	0.60
OPEN	1.10	0.30	1.25	0.35	1.55	0.40	1.70	0.50	1.90	0.57

PERFORMANCE MEASURED WITH FLOODED INLET (0 PSI), 70°F (21°C) AMBIENT AND WATER TEMPERATURE, AND VOLTAGE CONTROLLED AT 115 VAC. POSITIVE INLET PRESSURE WILL INCREASE THE DISCHARGE PRESSURE BY A SIMILAR AMOUNT, FOR A GIVEN FLOW. MAXIMUM INLET PRESSURE IS 60 PSI.

SHADED AREA DENOTES CONTINUOUS OPERATION CAPABILITY AT DESIGNATED PRESSURE AND CURRENT.



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, .75 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 offerred, the 7864. At 70 PSI, this pump will flow 1.40 GPM, drawing 1.04 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 about 20 to 30 minutes of run time, pumping about 35 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 25 minutes of sustained operation. Start up current exceeds normal running current, however, so cycling should be limited to 6 times per minute.