

# TQ Series 60Hz **Electronic Control Pump**

ISO 9001



#### Hydraulic Performance curve: P(psi) H (ft) 80 TQ Series 180 60Hz 70 160 TQ3700 60 140 TQ2200 120 50 100 40 80 TQ1500 30 TQ800 TQ400 20 40 10 20 70 US GPM

## **Applications**

The TQ series pumps are designed for water supply and pressure boosting in residential, commercial and light industrial applications where low or inadequate water pressure exists. It is suitable for boosting pressure from underground or surface water supplies.

## Suitable liquids

Potable water or other clean or non-corrosive liquids.

## **Operation Conditions:**

- 1. Ambient temperature: Max. +104°F (40°C)
- 2. Liquid temperature:  $+39^{\circ}F(4^{\circ}C) \sim +104^{\circ}F(40^{\circ}C)$
- 3. System Pressure: Max. 85 PSI
- 4. Relative humidity: Max. 85% (RH)
- 5. Under normal operation, it is not necessary to adjust the pressure unless the cut in pressure is higher than preset activation point (refer to specification).

### Product code



### **Product Features**

- 1. The TQ is a complete, all-in-one unit, consisting of pump, motor, pressure tank, and electronic controller. The built-in electronic controller provides constant pressure which ensures that the pump starts automatically when water is consumed and operates continuously until water is not required.
- 2. Compact design and guiet operation make the TQ series suitable for many applications.
- 3. The TQ is constructed from the top quality corrosion resistant materials.
- 4. Pump has built in dry-run shut off with automatic reset function.
- 5. The motor has built-in thermal overload to protect against high operating temperatures and over current. (Single phase motor only)
- 6. The TQ has an anti-cycling feature which prevents the pump from continuous starting and stopping when you have a dripping tap or minor leak in the system.
- 7. The pumps will lift water up to 25 ft. with foot valve and pump suction piping filled with water.







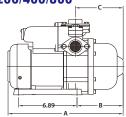
# TQ Series

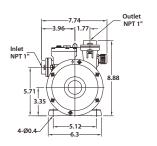
# **Electronic Control Pump**

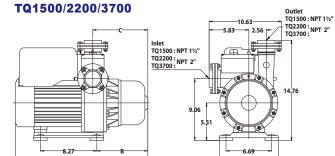
### **Materials**

| Part name            | TQ200/400            | TQ800                       | TQ1500/2200/3700 |  |  |  |
|----------------------|----------------------|-----------------------------|------------------|--|--|--|
| Pump casing          | Glass filled noryl   |                             |                  |  |  |  |
| Filling plug         | NyLon                |                             |                  |  |  |  |
| Outlet & Inlet       | SUS 304              |                             |                  |  |  |  |
| Intermediate Chamber | Glass filled poly    | SUS 304                     |                  |  |  |  |
| Impeller             | Glass filled         | SUS 304                     |                  |  |  |  |
| Mechanical Seal      | Ceramic+Cark         | Carbon+SiC+Viton            |                  |  |  |  |
| Shaft                | SUS 316              |                             |                  |  |  |  |
| Motor Shell          | <b>Coating Steel</b> | oating Steel Aluminum alloy |                  |  |  |  |

# Dimensions: (in.) TQ200/400/800







| Model       | A (in.) | B (in.) | C (in.) |
|-------------|---------|---------|---------|
| TQ 200      | 13.23   | 5.08    | 5.28    |
| TQ 400      | 13.56   | 5.43    | 5.63    |
| TQ 800      | 16.42   | 6.46    | 6.65    |
| TQ1500~3700 | 19.72   | 7.76    | 8.35    |

### **Suction Lift Performance Table**

| Model  | Discharge<br>pressure | Capacity in US gallons per Minute<br>Suction Lift in Feet |      |      |      |       |      |  |
|--------|-----------------------|---|------|------|------|-------|------|--|
|        | in psi                | 0   | 5    | 10   | 15   | 20    | 25   |  |
| TQ200  | 10                    | 12.6  | 11.4 | 10.2 | 9.2  | 8.2   | 7.1  |  |
|        | 20                    | 7.7   | 6.4  | 5.2  | 3.8  | 2.4   | 0.5  |  |
| TQ400  | 10                    | 16.6  | 15.6 | 14.6 | 13.6 | 12.7  | 11.7 |  |
|        | 20                    | 12.0  | 11.0 | 10.0 | 9.0  | 7.8   | 6.6  |  |
|        | 30                    | 7.1   | 5.8  | 4.5  | 3.2  | 2.0   | 0.6  |  |
| TQ800  | 10                    | 22.4  | 22.1 | 21.7 | 21.3 | 20.8  | 20.5 |  |
|        | 20                    | 20.7  | 20.2 | 19.8 | 19.2 | 18.8  | 18.2 |  |
|        | 30                    | 18.3  | 17.8 | 17.1 | 16.2 | 15.3  | 14.2 |  |
|        | 40                    | 14.7  | 13.8 | 12.9 | 12.1 | 11.1  | 10.2 |  |
|        | 50                    | 10.5  | 9.3  | 8.1  | 6.9  | 5.6   | 4.3  |  |
| TQ1500 | 10                    | 66.2  | 65.0 | 63.7 | 62.0 | 60.2  | 58.1 |  |
|        | 20                    | 58.2  | 57.0 | 55.3 | 53.7 | 51.7  | 49.0 |  |
|        | 30                    | 50.0  | 47.3 | 44.3 | 41.8 | 39.7. | 37.2 |  |
|        | 40                    | 38.2  | 35.7 | 32.5 | 29.0 | 24.8  | 20.0 |  |
| TQ2200 | 10                    | 69.0  | 69.0 | 68.7 | 67.8 | 66.7  | 65.3 |  |
|        | 20                    | 65.8  | 64.4 | 62.8 | 61.2 | 59.3  | 57.2 |  |
|        | 30                    | 58.0  | 55.9 | 53.3 | 50.5 | 47.2  | 43.5 |  |
|        | 40                    | 45.0  | 41.2 | 37.6 | 34.1 | 30.0  | 24.6 |  |
| TQ3700 | 10                    | 70.9  | 70.4 | 70.0 | 69.5 | 69.2  | 68.7 |  |
|        | 20                    | 68.9  | 68.5 | 68.2 | 67.9 | 67.3  | 66.2 |  |
|        | 30                    | 66.7  | 65.5 | 64.2 | 62.8 | 61.3  | 59.8 |  |
|        | 40                    | 60.4  | 58.5 | 56.5 | 54.3 | 51.9  | 48.8 |  |
|        | 50                    | 50.0  | 46.6 | 42.8 | 39.0 | 35.8  | 32.6 |  |
|        | 60                    | 34.0  | 30.4 | 25.8 | 20.0 | 12.7  | 5.7  |  |

Note - The total system pressure will be:

"the inlet supply pressure + max pump boost pressure."

## Specification:

| Model  | Power<br>(HP) | Cycle<br>( Hz ) | Phase<br>(Ø) | Voltage<br>(V) | Amp's<br>(A) | Inlet<br>(NPT) | Outlet<br>(NPT) | Preset activation pressure ( psi ) | Max discharge<br>pressure (psi) | Q max.<br>( GPM ) | N.W.<br>(lbs) |
|--------|---------------|-----------------|--------------|----------------|--------------|----------------|-----------------|------------------------------------|---------------------------------|-------------------|---------------|
| TQ200  | 1/4           | 60              | 1            | 115 or 230     | 4.0 or 2.0   | 1"             | 1"              | 20                                 | 31                              | 16.9              | 16.3          |
| TQ400  | 1/2           | 60              | 1            | 115 or 230     | 6.0 or 3.0   | 1"             | 1"              | 28                                 | 40                              | 18.5              | 19.6          |
| TQ800  | 1             | 60              | 1            | 115 or 230     | 11.0 or 5.5  | 1"             | 1"              | 36                                 | 67                              | 23.8              | 25.6          |
| TQ1500 | 2             | 60              | 1 or 3       | 230            | 9.5 or 6.5   | 11/2"          | 11/2"           | 43                                 | 58                              | 66.0              | 62.8          |
| TQ2200 | 3             | 60              | 3            | 230            | 9.5          | 2"             | 2"              | 43                                 | 60                              | 71.3              | 68.3          |
| TQ3700 | 5             | 60              | 3            | 230            | 12           | 2"             | 2"              | 43                                 | 72                              | 71.3              | 74.4          |

