## For Non-Health Hazard Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

# **FotoGuard/FotoPanel** Series 440 Thermostatic Tempering for Film Processing

## **Product Specification**

### FotoPanel

These fixtures include HydroGuard T/P<sup>®</sup> e420 Series Thermostatic Valves. Once the temperature and volume controls are adjusted, only the ON/OFF switch is used to start or stop the process. Dial thermometer with external recalibration screw continuously indicates water temperature; vacuum breaker in outlet prevents backflow; furnished with union strainer checkstops for ½" (15mm) inlets. Stainless steel cabinet for wall or deck mounting. Three different models available.

#### Model 440-1000:

Capacity 1 – 7\* GPM (.06 – 0 .44 l/s @ 310 kPa) differential. Compensates for both temperature and pressure fluctuations.

#### Model 440-1020:

Capacity 1  $-7^*$  GPM (.06 - 0.44 l/s @ 310 kPa) differential. Recessed cabinet. Compensates for both temperature and pressure fluctuations.

#### Model 440-3000:

Capacity 5 –  $15^*$  GPM (0.32 – 0.95 l/s @ 310 kPa) differential. Compensates for both temperature and pressure fluctuations.

#### Thermostatic FotoGuard for Concealed Piping

Attractive, compact control maintains precise water temperature is concealed piping installations. Has separate controls, a thermostatic mixing valve for close temperature adjustments, an integral volume control and strainer checkstops. (Does not have separate on/off valve). Model 440-1550 features a 1 - 7 GPM<\* (.06 - .44 l/s) capacity.

#### Thermostatic FotoGuard for Exposed Piping

Rugged controls with polished chrome plate finish for exposed piping installations. Separate controls include the thermostatic mixer for close temperature adjustments and integral volume control. Furnished with union strainer checkstops for  $\frac{1}{2}$ " inlets, these exposed FotoGuards are available with 1 – 7 GPM\* (.06 – .44 l/s) capacity (Model 440-1500) or 5 – 15 GPM\* (.32 – .95 l/s) capacity (Model 440-1510). \* GPM rate @ 45 psi differential.

#### Dimensions



Powers product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Powers Technical Service. Powers reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Powers products previously or subsequently sold.







#### FotoGuard/FotoPanel Accessories

**Piping Kit:** Similar to the accessories included in the 440 FotoGuard Supply Fixture, this piping kit includes all necessary piping and nipples, vacuum breaker and on/off valve necessary for use with FotoGuards 440-1500 and 440-1510. (Order thermometer separately.) All parts are finished in chrome plating, part no. 131-219.

Vacuum Beaker: Atmospheric type, same as included in all FotoPanels and in FotoGuard Piping Kit described.

Offered in two different finishes, rough bronze (part no. 043-834) and chrome plated (part no. 043-834A).

**On/Off Valve:** For positive on/off control without disturbing the present thermostatic and volume controls, this on/off valve can be used with Fotoguard models 440-1500 and 440-1510. Polished chrome plate finish, part no. 440-061.

**Thermometer:** This is offered for replacement on any FotoPanel or as an additional item for installation on the piping kit described above. Horizontal 2-1/6" (52mm) long bulb with temperature range of 30° to 103° F (-1° to 39°C), the thermometer features an external calibration screw of zero reset, with a response speed of Gr. 1 per AMS PH 4.7-1958. Stainless steel with black dial and gasketed glass, part no. 894-3897.

**Thermometer Adapter:** Used with above thermometer, this adapter features chrome plated finish for installation in a standard ½" (15mm) pipe tee. Part no. 440-103.

## Specification

#### For FotoGuard Units:

Water mixing valves for film processing units shall contain a powerful thermal actuator thermostatic type valve suitable to compensate for pressure and temperature variations in water supplies. Unit shall have nominal capacity of \_\_\_\_\_ GPM (\_\_\_\_\_ I/s).

The unit shall be Powers FotoGuard Model (440-1500\*, 440-1510\* or 440-1550\*). Any alternate must have a written approval prior to bidding.



FotoGuard Model 440-1500

#### For FotoPanel Models:

Water mixing valves for film processing units shall contain a powerful paraffin actuator thermostatic type valve suitable to compensate for pressure and temperature variations in water supplies. Unit shall have nominal capacity of \_\_\_\_\_\_ GPM (\_\_\_\_\_\_\_ I/s). Unit shall be a complete supply fixture for surface (or deck) mounting, complete with separate temperature adjustment, volume adjustment, and on/off valve. Assembly shall include (vacuum breaker,) union connected inlet strainer checkstops, high contrast black dial thermometer with white numerals and interconnecting piping. All piping shall be enclosed in a stainless steel panel. The unit shall be Powers FotoPanel (440-1000\*, 440-1020\* or 440-3000\*). Any alternate must have a written approval prior to bidding.

\*Select model number based upon capacity requirements.



FotoPanel Model 440-1000

