

microFLEX M2B Controller

Single Boiler/Condensate Controller

The ProMinent® microFLEX is a powerful controller integrating built-in diagnostics with realtime monitoring in a compact design.

Standard Features

- Boiler or Condensate Conductivity input
- Single water meter input
- Boiler status input
- Chemical feed relay
- 5 Key universal keypad
- 2 Line, 16 character backlit display
- Boiler blowdown or condensate diverter relay (solenoid valve or motorized ball valve)



Benefits

- **Selectable chemical feed mode:** Provides 3 feed modes; feed on volume, blowdown & feed and percentage time.
- **Conductivity control:** Can be programmed using timed or continuous sampling.
- **Water meter input:** Allows for chemical to be fed based on water volume versus timed pump control methods generally found on comparably priced controllers.
- **What and Why Information:** Diagnostics shown on display are a valuable troubleshooting tool. Conductivity valve and chemical pump relays show complete status. Shows WHY the relay is on/off.
- **Single point calibration:** For ease of start up and operation. Warning message immediately detects fouled or faulty sensors.
- **Controller run time:** Gives total hours per day and total operating days since initial installation.
- **Robust diagnostics:** Provides complete 24 hour history of blowdown valve operation and chemical relay timing intervals.
- **Keypad password:** Eliminates unauthorized adjustments.
- **Communication options:** Includes Ethernet networking, dry contact alarm relay or 4-20mA output on conductivity.
- **Optional web browser user interface with networking capability:** Provides ability to direct connect to the controller from a portable workstation, such as a laptop computer. Can also view critical processes remotely through the use of a LAN. View our live boiler demo at <http://208.37.73.86:1005>

ProMinent®

Visit our XTRANET <www.prominentxtranet.com> to:

- sign up for our electronic newsletter
- download literature and manuals
- validate your product warranty

microFLEX M2B Controller

Specifications

| Rating - Detail | | Notes |
|--|--|---|
| Analog-Digital I/O | | |
| Conductivity Sensor | Auto ranging from 100uS to 10,000uS, rated 250psi | Single point calibration |
| Water Meter Input | 400Hz, 0.5mA @ 5VDC measurement current | Accepts paddlewheel or contacting head |
| Relay Outputs | 1 SPST (Chemical feed), 1 SPDT (Bleed) | Powers either solenoid or motorized valve |
| 4-20mA Output (optional) | Single DC isolated, loop powered | User definable span, alarms on open loop |
| Alarm Relay (optional) | 500mA @ 24VDC Dry contact set, | Normally closed contact, open unfused on alarm |
| Communications User Interface | | |
| Keypad-LCD | 5 Key tactile feedback, universal characters 2 line x 16 character, backlit | Scan rate 100 mS nominal User adjustable contrast |
| 10 Base T, TCP/IP Ethernet LAN (optional) | HTML micro web server with user definable IP address | Static IP Use browser to see I/O, edit program |
| Controls | | |
| Relay ON/OFF | Captured sample & ON/OFF control | Relay 1 chemical feed, Relay 2 bleed valve |
| Volumetric feed | User set, measure volume & pump | on time |
| Interlocking | Contact set input | Blowdown & feed stop |
| Alarms - Feed Limit Timers | Minutes per day | Auto-reset @ Midnight |
| System | | |
| Electrical | 120VAC, 60Hz | |
| Fusing | 5 AMPS @ 120VAC | |
| Surge Suppression | Relay 2 N.O. contacts snubbed @ 0.1uF, 150ohm | Varistor on AC line input |
| Accessory Power | 15-22VDC, unregulated, thermally fused @ 50mA | |
| Enclosure | Non-metallic, NEMA 4X | 5.9"W x 5.9"H x 3.5"D (150mm W x 150mm H x 90mm D) |
| Certifications | | |
| CSA, CE, UL | CSA tested to comply with UL | |