

Scale reduces efficiency, and left unchecked can rupture your tube in days. Protect yourself with scale prevention equipment today.

**EASY REAGENT  
REPLACEMENT**

# COLORMETRY

**CMU-224HE**

## WATER HARDNESS MONITOR

### REDUCE DAMAGING AND EFFICIENCY-ROBBING SCALE WITH MIURA'S COLORMETRY HARDNESS DETECTOR.

With a control panel that interfaces with Miura's MOM and ER dashboard systems, it's an easy-to-use, time-saving solution. Automatically measure the water hardness levels and detect the slightest hardness leakage in your system and correct it before trouble starts.



Can be installed stand-alone, or for ultimate protection from water hardness, integrate with Miura's MW Softener System.



# MiURA

**ON-DEMAND STEAM SOLUTIONS**

# FEATURES

- Automatic monitoring system for water hardness leakage
- Detects the slightest hardness leakage
- Alarm and alert data display
- Interfaces with BL boiler controller
- Memory function tracks most recent alarms
- One-touch cartridge replacement
- Compact design
- Self-calibrating
- Connects to Miura's remote monitoring system (MOM) for added security and protection

# SPECIFICATIONS

Item	Colormetry CMU-224HE	
Usage	Hardness monitor	
Method	Colorimetric analysis	
Monitor	5 leakage level indications (as CaCO <sub>3</sub> ) 0mg/L, 1mg/L, 2mg/L, 3mg/L, >5mg/L	
Alarm Set Points	Select one from below 4 points ≥1mg/L, ≥2mg/L, ≥3mg/L, ≥5mg/L	
Remote Signal Input	No voltage contact input (Contact A or contact B)	
Alarm Type	Buzzer	
External Alarm Output	Open collector output Maximum capacity: DC24V 70mA	
Operation Output		
Cartridge Exchange Output		
Raw Water Pressure	0.05~0.49MPa (7.2~71psi)	
Water Temperature	41~104°F (5~40°C)	
Operation Temperature	41~122°F (5~50°C)	
Humidity	20~90%RH (No condensation, no freezing)	
Power	AC24V 50/60Hz	
Power Consumption	15W (*1)	
Cartridge Replacement	Every 4 months (*2)	
Connector Diameter (*3)	Inlet	Diameter 1/4" (Ø6) tube connected
	Outlet	Diameter 5/16" (Ø8) tube connected
Drainage	Approx. 1,000 mL/monitor (*4)	
Installation	Indoor, wall mounted (*5)	
Weight	4.9lb (2.2kg)	
Dimensions	5" (w) x 4" (l) x 20 1/4" (h) (125 (w) x 100 (l) x 515 (h) mm)	

(\*1) Power consumption during operation.

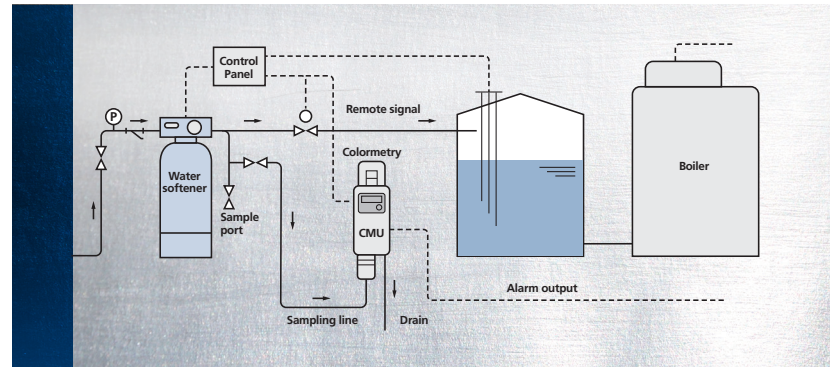
(\*2) The warranty period of a reagent cartridge is 1 year for unopened product or 4 months after opening the pack. The reagent will last approximately 4 months on the basis of an hourly monitor. If monitors are taken every 30 minutes or repeated frequently, the reagent may not last for 4 months.

(\*3) The inlet and outlet tubes are attached to the device.

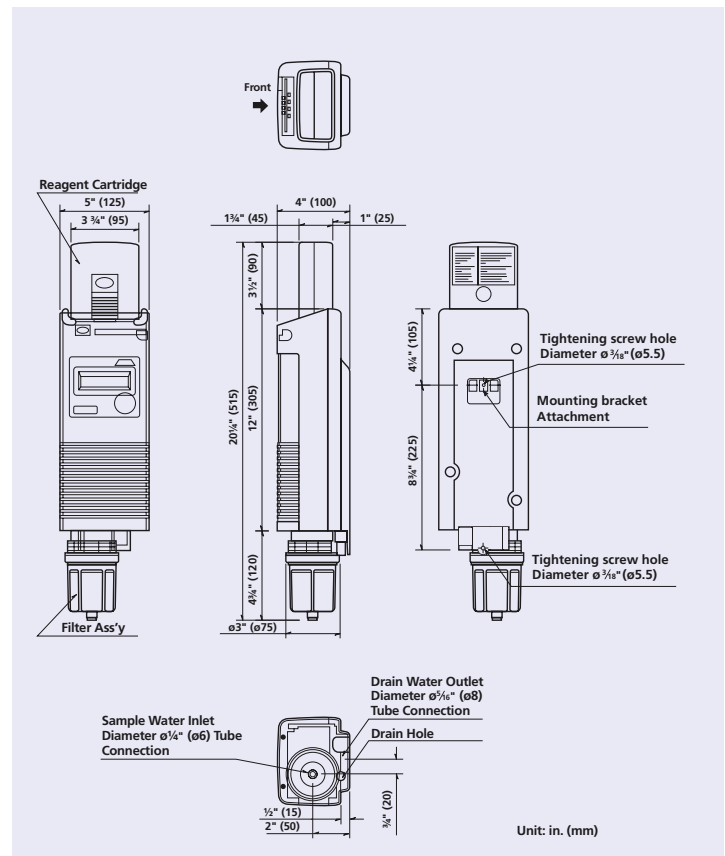
(\*4) The drainage volume with a constant flow valve is listed. The drainage volume may vary depending on the water temperature or degradation level of a constant flow valve.

(\*5) The mounting bracket is attached to the device.

# SYSTEM SCHEMATIC DIAGRAM



# MEASUREMENT



## Caution

1. The instructions in the operation manual must be followed exactly.
2. Even though Colormetry is a device for hardness leakage detection, excessive contamination other than the composition of hardness in sample water may affect the result. Therefore, the sample water for the device has to be collected directly from outflow of the softener (at ball valve).
3. The shelf life for the cartridge is about one year from the date manufactured.
4. Water quality affects the filter. Hard water shortens the filter life.



ON-DEMAND STEAM SOLUTIONS

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