

Combined Residual Chlorine Recorder

An on-line Chlorine Recorder shall be provided to continuously measure combined chlorine at the _____ (Specify Location) _____. Each Residual Chlorine Recorder System shall consist of a direct measuring chlorine sensor with 25 feet of cable, and a 10 inch circular chart recorder with integral sensor amplifier and suitable for either wall or panel mounting. The submersible chlorine sensor shall be supplied complete with mounting hardware for mounting the sensor to standard 2" handrail. (Or optionally, the unit shall be supplied with a constant head overflow assembly for pumped sample use.)

The combined residual chlorine sensor shall be a direct measuring polarographic sensor utilizing a special polymeric membrane to isolate the sensing electrodes from the sample and to eliminate the potential for electrode contamination. The membrane shall allow chlorine to diffuse into the sensor where it will react with the sensing electrode, generating a signal that is linearly proportional to combined chlorine concentration. The sensor assembly shall also contain an RTD temperature sensor to continuously measure sample temperature and apply compensation to the measured chlorine value. The chlorine sensor shall be constructed with a modular design that allows complete removal of the sensing module without affecting the mounting assembly or sensor wiring. The assembly shall be capable of accepting a spare sensing module as a direct plug-in replacement. Chlorine sensors shall be supplied complete with at least 10 spare membranes, a bottle of electrolyte and a spare parts kit that includes all o-rings and special hardware.

The Residual Chlorine Recording-Monitor shall provide a 10 inch circular chart, for the purpose of continuously recording chlorine concentration and with a scale of 0-100 % representing the selected measuring range. The Chlorine Recording-Monitor shall be housed in a NEMA 3 enclosure with a circular glass viewing window. An LCD display shall be provided to directly display chlorine concentration and is to be visible without opening the door of the recorder. The chart speed shall be selectable for either 24-hour or 7-day and the measuring ranges to be adjustable from 0-5 PPM or 0-20 PPM programmable through the front programming keypad. A box of 25 chart papers shall be provided scaled 0-100% with one side for 24 hour rotation and the other for 7 day rotation.

The complete Residual Chlorine Recording-Monitor shall be Series B20/63 as manufactured by Analytical Technology, Inc. or approved equal.