

E-CHEK



Filter Bed Expansion and Media Loss

Monitoring in Filtration Plants

The E-CHEK Sand bed Expansion Check, developed by MD Instruments Ltd, combining media suspended solids and sand depth expansion measurements, is a low-cost microprocessor-based monitoring unit.

The E-CHEK Profiler unit is intended for continuous operation to monitor the suspended solids (mg/l or % solids) of the media and Sand bed Expansion (mm or %) during the backwash process.

Applications

Typical applications of the E-CHEK can be found Water Treatment works such as sand bed expansion during the backwash process.

Measurement Principle

The Infra-Red light is absorbed by the suspended solids present in the sample during the wash cycle, and received by a sensitive array of silicon photodiodes. The detected signal is conditioned, to eliminate the presence of ambient light, and fed to the microprocessor for further analysis and display to provide a direct solids read-out in mg/l (or % solids) and expansion depth in mm (or %).

Specifications

Parameters	Solids	Depth
Range (SH32 Head)	0-9,999 mg/l	-20 - +40 % *
Sensitivity	10 mg/l	1 % *
Cable Length	Standard 8 metre (20ft)	
Power	110/240AC 50/60Hz	
Current Output	Four outputs 0/4-20mA <500Ohm	
Relay Output	Up to four miniature relays	
Digital Interface	RS232C	
Power Consumption	Min 5VA Max 30VA	
Housing	ABS, IP65	
Size (Instrument Case)	380 x 280 x 180 mm	
Weight (Instrument Case)	1.5 kg	

* different ranges can be provided upon enquiry

Features

- * Dedicated Sand bed expansion Depth & SS profiler
- * Operational compatibility with MD-products
- * Menu driven instructions via 2x16 Dot Matrix Display
- * High Repeatability and Reliability
- * Simple to use and calibrate via front panel keypad
- * Direct Solids (mg/l, %) and Level (mm, %) readout
- * Permanent storage of calibration settings
- * Programmable storage of calibration settings
- * Programmable threshold limits
- * Up to 4 miniature relay outputs for High & Low alarms
- * Up to 4 current outputs (programmable)
- * RS232C Interface output

In the interests of improving and updating its equipment, MD Instruments Ltd reserves the right to alter the specifications to equipment at any time.

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