

FIQ is a flow indicating totaliser based on the latest single chip microcontroller technology. The totaliser accepts 4-20mA or 0-10V input from flow transmitter, computes and displays both the rate of flow and the totalised value on two banks of display. Built-in square root extraction and selectable integration time base for totalised value are available. Optional features available are RS232C/RS485 port with MODBUS protocol and retransmission analog output (4-20mA) proportional to the rate of flow.



## CFIQ

This is a temperature and pressure compensated flow rate indicating totaliser. This accepts one rate of flow input, one pressure input and one temperature input (TC/RTD) and calculates the compensated flow rate after applying compensation for the instantaneous temperature and pressure. Totalisation is done based on the compensated rate of flow. Two relay outputs are provided for alarm signals. Optional retransmission analog output (4-20mA) proportional to compensated rate of flow and RS232C/RS485 port with MODBUS protocol features are available.



## Features

- Based on the latest single chip microcontroller.
- Two models one with 4 & 6 digits and other with 5 & 8 digits for displaying Rate of Flow and cumulation values.
- Built-in 24VDC supply for powering transmitter.
- Cumulation value stored in EEPROM.
- Password protection for changing the settings and totalized value reset.
- Optional RS232C/RS485 serial port with MODBUS slave RTU protocol .
- Integration time base selectable .
- Linear / square root extraction selectable.
- Two relay outputs.
- Optional Ex-Proof / IP65 enclosure.
- All settings stored in EEPROM to prevent data loss.
- Universal SMPS (90 to 270 V AC/DC) or optional 24V DC-DC converter.

TECHNICAL SPEC.	FIQ-46	FIQ-2000	CFIQ
Type	Microcontroller based	Microcontroller based	Microcontroller based
Item	Flow Indicating Totaliser	Flow Indicating Totaliser	Compensated flow indicating Totaliser
Type of Input	4-20mA /1-5V DC/0-10V DC	4-20mA /1-5V DC/0-10V DC	4-20mA, TC or RTD
No of Input	Single	Single	Three (1 for TC or RTD,1 for pressure & 1 for flow)
Display	0.56" 4 digit LED for Rate of Flow 0.56" 6 digit LED for Cumulation	0.56" 5 digit LED for Rate of Flow 0.3" 8 digit LED for Cumulation	0.56" 5 digit LED for Rate of Flow 0.3" 8 digit LED for Cumulation
Rate of Flow range	Programmable Max.Range - 9999. DP format - 0/1/2	Programmable Max.Range - 60000. DP format - 0/1/2	Programmable Max.Range - 10000. DP format - 0/1/2
Accuracy	±0.1% FS, ±1 digit	±0.1% FS, ±1 digit	±0.1% FS, ±1 digit
Integration Time base for Totalised value	Per Minute/Per Hour Programmable	Per Minute/Per Hour Programmable	Per Minute/Per Hour Programmable
Liner/Square Root Extraction	Selectable through front keypad	Selectable through front keypad	Selectable through front keypad
Cumulation Storage	EEPROM	EEPROM	EEPROM
Transmitter Power	+24V DC built-in ( Max 30mA)	+24V DC built-in ( Max 30mA)	—
Alarm Relays	2 Nos. with 1 C/O contact	2 Nos. with 1 C/O contact	2 Nos. with 1 C/O contact
Retransmission output (Optional)	Not Available	Isolated 4-20mA proportional to rate of flow.	Isolated 4-20mA proportional to compensated flow.
Power Supply	Universal SMPS:90-270V AC/DC Optional 24V DC	Universal SMPS:90-270V AC/DC Optional 24V DC	Universal SMPS:90-270V AC/DC Optional 24V DC
Totaliser reset	With or without password protection	With or without password protection	With or without password protection
Termination of Input & Output	Through TBs at rear.	Through TBs at rear.	Through TBs at rear.
Environment condition	0-55 Deg. C, upto 95% Rh.	0-55 Deg. C, upto 95% Rh.	0-55 Deg. C, upto 95% Rh.
Communication (Optional)	RS232C/RS485 port	RS232C/RS485 port	RS232C/RS485 port
Communication Protocol & Settings	Industry standard MODBUS Station number , Baud Rate & parity programmable	Industry standard MODBUS Station number , Baud Rate & parity programmable	Industry standard MODBUS Station number , Baud Rate & parity programmable
Dimension (in mm)	Overall : 96(L) x 96(H) x 150(D) Cutout : 92(L) x 92(H)	Overall : 96(L) x 96(H) x 210(D) Cutout : 92(L) x 92(H)	Overall : 96(L) x 96(H) x 210(D) Cutout : 92 (L) x 92 (H)
Enclosure	MS powder coated optional Ex-proof / IP65	MS powder coated optional Ex-proof / IP65	MS powder coated optional Ex-proof / IP65
Mounting	Panel Flush Wall Mounting-Ex-proof / IP65	Panel Flush Wall Mounting-Ex-proof / IP65	Panel Flush Wall Mounting - Ex-proof / IP65

11-06



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Information in this Catalogue is subject to change without notice

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