

EMCO FP-93 Flow Processor

Information Sheet for Crimson v2.0

Compatible Devices

- EMCO Flow Processors

Verified Device

- FP-93

Accessible Data

Prefix	Description	Type	Notes
F	Float Registers	Real	
L	Long Integer Registers	Long	
S19	Temperature Units <String>	Long	2
S24	Pressure Units <String>	Long	2
S26	Density Units <String>	Long	2
S38	Volume Flow Units <String>	Long	2
S44	Mass Flow Units <String>	Long	2
S49	Energy Flow Units <String>	Long	2
S94	Unit Information Block <String>	Long	2
C03	Analog Input #1 current, mA	Real	
C04	Analog Input #2 current, mA	Real	
C05	Analog Input #3 current, mA	Real	
C06	Analog Input #4 current, mA	Real	
C51	Analog Output current, mA	Real	
C46	Avg. Energy Flow	Real	
C41	Avg. Mass Flow	Real	
C21	Avg. Pressure	Real	
C11	Avg. Temperature #1	Real	
C15	Avg. Temperature #2	Real	
C35	Avg. Temp. Comp. Volume Flow	Real	
C31	Avg. Volume Flow	Real	
C50	Calculation Interval, secs.	Real	
C91	Clear Faults and Changed Flag	Long	
C92	Clear Statistical Values	Long	

C93	Clear Totalizers	Long	
C66	Compressibility Factor	Real	
C25	Density	Real	
C18	Differential Temperature	Real	
C45	Energy Flow	Real	
C68	Enthalpy	Real	
C69	Enthalpy (Temp. #2)	Real	
C90	Fault Flags	Long	
C08	Flow direction 1=Fwd, 0=Rev	Long	
C07	Frequency, Hz	Real	
C40	Mass Flow	Real	
C48	Max. Energy Flow	Real	
C43	Max. Mass Flow	Real	
C23	Max. Pressure	Real	
C13	Max. Temperature #1	Real	
C17	Max. Temperature #2	Real	
C37	Max. Temp. Comp. Volume Flow	Real	
C33	Max. Volume Flow	Real	
C47	Min. Energy Flow	Real	
C42	Min. Mass Flow	Real	
C22	Min. Pressure	Real	
C12	Min. Temperature #1	Real	
C16	Min. Temperature #2	Real	
C36	Min. Temp. Comp. Volume Flow	Real	
C32	Min. Volume Flow	Real	
C62	Obscuration factor	Real	
C61	Profile Factor	Real	
C20	Pressure	Real	
C65	Reynolds number	Real	
C01	RTD #1 resistance, ohms	Real	
C02	RTD #2 resistance, ohms	Real	
C27	Specific Volume	Real	
C67	Supercompressibility Factor	Real	
C10	Temperature #1	Real	
C14	Temperature #2	Real	
C34	Temp. Comp. Volume Flow	Real	
C81	Time, Alarm, A/D Overage	Long	
C76	Time, Alarm, Analog Output	Long	
C77	Time, Alarm, Flow Input Range	Long	
C80	Time, Alarm, Pressure Input Range	Long	
C75	Time, Alarm, Relay Output Rate	Long	
C78	Time, Alarm, Temp. Input Range	Long	
C79	Time, Alarm, Temp. Input 2 Range	Long	

C82	Time, Fault, Battery	Long	
C83	Time, Fault, EEPROM	Long	
C85	Time, Fault, RAM	Long	
C84	Time, Fault, ROM	Long	
C71	Time, Changed Flag Set	Long	
C70	Time, Current	Long	
C74	Time, Power Failure	Long	
C72	Time, Statistical Values Cleared	Long	
C73	Time, Totalizers Cleared	Long	
C56	Totalizer #1, Assignment	Long	
C52	Totalizer #1, Fwd, Non-Reset	Long	
C53	Totalizer #1, Fwd, Resettable	Long	
C57	Totalizer #1, Scale Factor	Real	
C58	Totalizer #2, Assignment	Long	
C54	Totalizer #2, Rev, Non-Rst	Long	
C55	Totalizer #2, Rev, Resettable	Long	
C59	Totalizer #2, Scale Factor	Real	
C63	Velocity, Line	Real	
C60	Velocity, Raw	Real	
C64	Viscosity	Real	
C30	Volume Flow	Real	

NOTES

NOTE 1: Programming of individual constants in the configuration data is not permitted with the protocol available to this driver.

NOTE 2: <String> tag configuration:

For those items marked <String>, configure the tags as shown below, setting the "Length" to an appropriate value for the item.

The screenshot shows a configuration window for 'Variable Data'. On the left, there is a vertical sidebar with four tabs: 'Data', 'Format', 'Colors', and 'Security'. The 'Data' tab is selected. The main area contains the following settings:

- Mapping:** A dropdown menu set to 'FP1' and a text input field containing 'S24', with an 'Edit...' button to its right.
- Encoding:** A dropdown menu set to 'Packed High-to-Low'.
- Access:** A dropdown menu set to 'Read Only'.
- Storage:** A dropdown menu set to 'Non-Retentive'.
- Length:** A text input field containing '16' followed by the text 'characters'.

Cable Information

RS232 Serial Connection

EMCO FP-93	SIGNAL NAME	G3
3	Tx >> Rx	2
2	Rx << Tx	5
5	0V	3/4