700 SERIES CONTROLLERS

- **Microprocessor Based**
- **Two Line Backlit LCD Display**
- **Three User Function Keys**
- **24VDC Supply or 80-260VAC**
- **1 4/20MA Analog Input**
- **1 4/20MA Analog Output**
- **Up to 8 Digital Form 'C' Inputs**
- **Up to 4 10A Relay Outputs**
- **Fully User Programmable**
- **RS485 MODBUS® Data Port**
- **6 LED Indicator Lights**
- **P.I. Control Option**
- **Input/Output Adder Board Available Adds 1AI/1AO/8 D.O.**

Sigma Controls, Inc., 700 Series of cost effective multi application controllers is based on 25 years of control experience. Utilizing state of the art microprocessor technology, the 700 Series offers unmatched versatility and straightforward programming for many common applications found in water and wastewater applications.

SPECIFICATIONS

- Power Supply: 24VDC ± 2% @ 4VA
  Optional AC Supply, 85-260VAC
- Relay Outputs (4): 10A @ 120VAC
  8A @ 30VDC
- (1) 4/20MA Analog Input, (1) 4/20 Analog Output
- 8 Digital Inputs, Form 'C' Dry Contacts Designed for Intrinsic Safety
- Operating Temperature: -20° to 60° C
  Storage: -30° to 85° C
- Relay Life: 100K Cycles
- Termination: Removal Screw Compression Terminal Strips (2)
- Display Two Line Alphanumeric, Backlit

- Data Communication: RS485, MODBUS®
- (6) Multifunction LED Indicators on Panel Face

MECHANICAL

- 1/4 DIN Panel Mount 96m X 96m x 110 (3.77 X 3.774.33")
- Weight: 15.5 Oz.
- Nema 4X Front Panel
- Removable Barrier Terminal Strips, Screw Compression, (2 ea.)
- Optional Nema 4X FRP Wall Mount Enclosure with Back Panel for Accessory Items, 9-1/4" X 7-1/4" X 5"

700 SERIES CONTROLLERS
<u>MODEL VARIANTS</u>

700 LM LEVEL METER

- Programming Digital Process Filter
- Full Diagnostic Screen
- 4/20MA Input (Scaleable)
- 4/20MA Output((Scaleable)
- Selectable Decimal Point
- Selectable Engineering Units
- Dual 'On-Screen' Alarms with Deadband
- 6 LED Indicators (3 Green, 3 Red) Operated by External Digital Inputs
- 1/4 DIN Panel Mount or Nema 4X Enclosure
- RS485 MODBUS® Data Outputs

700 LC1 LEVEL CONTROLLER

- Same Features as 700LM **PLUS**
- Two Form 'C' 5A Relay Outputs with Setpoint and Deadband Adjustments
- On Screen Relay Status Indicator

700 LC2 LEVEL CONTROLLER

- Same Features as 700LC1 **PLUS**
- Two Additional Form 'C' 5A Relay Outputs with Setpoint and Deadband Adjustments
- On Screen Relay Status
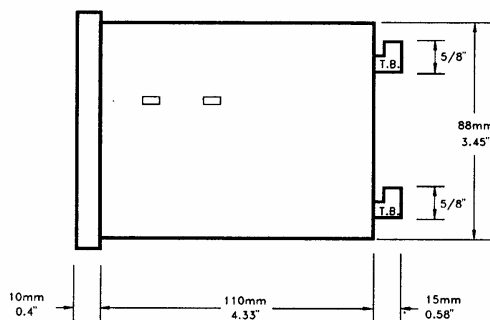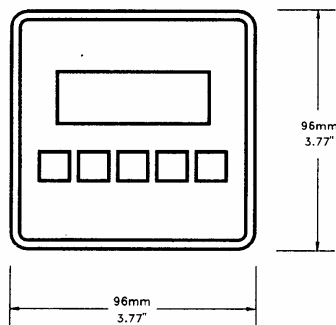
700 FC1/FC2 FLOW CONTROLLER

- Same Features as LM **PLUS**
- Rate Indicator from Analog Input
- Scaleable Totalizer with Reset
- Two Form 'C' 5A Relay Outputs (FC1)
- Four Form 'C' 5A Relay Outputs (FC2)
- Optional PI Control

<u>AVAILABLE OPTIONS</u>

- 700LM (A-B-C-D)
- 700LC1 (A-B-C-D)
- 700LC2 (A-B-C-D)

A	1 = 110VAC Power (Option)	2 = 24VDC (Std)
B	1 = 1/4 DIN Panel Mount	2 = Nema 4X Enclosure

C	0 = No Port
	 1 = MODBUS® Slave
	    Variables Available for SCADA
		2 = MODBUS® Master
		    Remote Analog Input
		 3 = Special Comm
		    Call for $

D	0 = Standard	1 = P.I. Control Option
	2 = Input/Output Adder Card	

EXAMPLE: 700LM-1-1-0-1

96mm 3.77"

96mm 3.77"

T.B. 5/8"

88mm 3.45"

T.B. 5/8"

10mm 0.4"

110mm 4.33"

15mm 0.58"

MADE IN U. S. A.

SIGMA CONTROLS, INC. 217 S. 5TTH ST., PERKASIE, PA 18944
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