

### AMS700

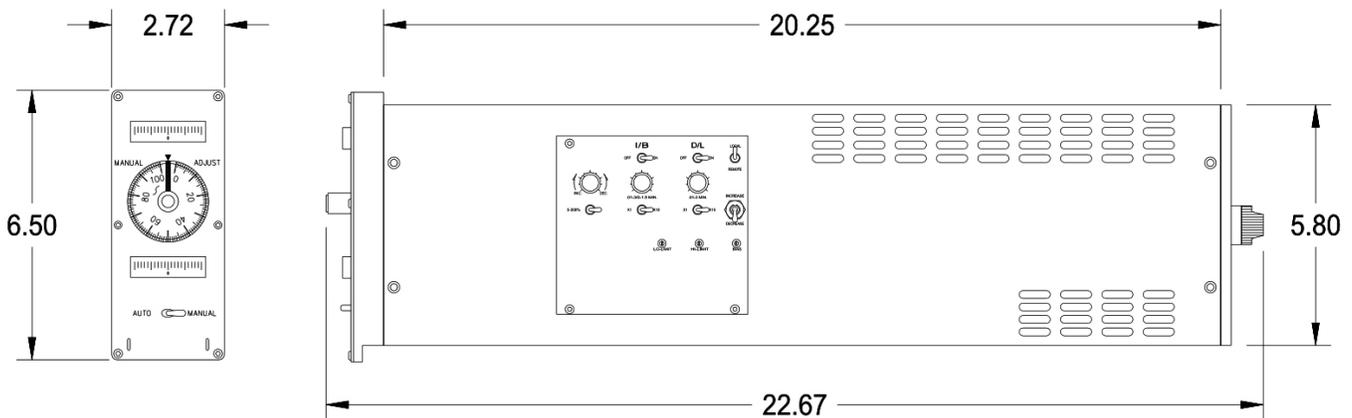
The AMS700 Auto-Manual and Ratio Auxiliary Stations replace the obsolete Foxboro 67H automatic/manual controller systems with a wide selection of manual and automatic loading stations.

The AMS700 output is typically a 10 to 50 mA dc signal, which is compatible with most standard instrumentation, including the NUSI 700 Series PIDA700 Proportional, Integral, & Derivative Controller.

All of the circuitry has been designed using high-reliability, solid-state devices to ensure top performance and long life. AMS700 modules may be mounted in combination with other panel instruments, such as controllers and recorders, to provide maximum operator interface.



AMS700



# NUSI 700 Series

## Automatic/Manual Controller System

### SPECIFICATIONS

Power Supply Voltage:	85 to 132 Vac, dc or 47 to 440 Hz
Voltage Effects:	Less than 0.05% change in output span for all listed voltage supplies
Power Consumption:	4.7 W, 7.7 VA (maximum) without optional loop power supply
Input Range:	10 to 50 mA dc into 100 $\Omega$ ; 4 to 20 mA dc into 250 $\Omega$
Output Range:	10 to 50 mA dc into 600 $\Omega$ (maximum); 4 to 20 mA dc
Meters:	2.5% accuracy, 20 gradations Output meters show 0% to 100% Process meters show 0% to 100% (Can also read the following inputs: 1 to 5 Vdc, 10 to 50 mA dc, or 4 to 20 mA dc) Deviation meters show $\pm 50\%$
Integral Power Unit:	80 Vdc, to drive force balance transmitter up to 600 $\Omega$ Separate fuse and load adjustment
Setpoint Dial:	0% to 100% calibrated dial corresponds to 10 to 50 mA dc (4 to 20 mA dc) output (Also available with dials calibrated for 10 to 50 mA or 4 to 20 mA)
Time Response:	Less than 20 ms from application of a step change at the input to a change in the output (resistive load) of 63% of the final value (filters turned off or removed from circuit)
Accuracy:	$\pm 0.5\%$ of output span
Linearity:	Better than 0.05% of output span
Repeatability:	$\pm 0.25\%$ of span
Fuse:	2.0 A fast acting, 250 Vac type 3AG
Ambient Temperature:	35 °F to 122 °F (2 °F to 50 °C) (normal operation) 122 °F to 135 °F (50 °C to 57 °C) (abnormal operation for 200 hours) -40 °F to 185 °F (-40 °C to 85 °C) (storage)
Temperature Effects:	Zero and span will not change by more than 0.1% of input value for each 10 °F change in temperature between 40 °F to 120 °F (5 °C to 49 °C)
Relative Humidity:	0% RH to 95% RH, non-condensing
Radiation Limits:	104 rad TID gamma
Seismic Qualification:	Qualified to IEEE 344-1975/1987 for structural integrity

### HOW TO ORDER

The model number and configuration typically should be specified as follows:

AMS700-M	(Manual Station)
AMS700-AM	(Automatic/Manual Station)
AMS700-MB	(Manual Bias Station, forward action or reverse action)
AMS700-MB SPECIAL	(Manual Bias Station with four-position auto/manual switch)
AMS700-RS1	(Ratio Station)
AMS700-RS2	(Ratio Station with external bias input and internal bias)
AMS700-RS3	(Ratio Station with external bias input)
AMS700-RS4	(Ratio Station with internal bias only)
AMS700-SP	Automatic/Manual Station with special setpoint)
AMS700-MM	(Monitor Manual Station)
AMS700-AM SPECIAL	(Automatic/Manual Station with four-position auto/manual switch and external deviation input)

#### CONTACT INFORMATION:

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