

Description

Indicates rate, total, and set points. Rate and total can be simultaneously displayed. The unit contains two process inputs, five control inputs, one current and four control outputs. A user-friendly menu system provides scrolling help messages to make programming simple when changes are required. The unit contains a set point lock out system to prevent unauthorized changes from the front panel and a 10-year memory backs up all program settings and flow parameters in case of a power failure. The unit can be factory programmed for your application. Use with Niagara's Nutating Disc, Oscillating Piston, and Turbine Flowmeters.

Technical Information

Functional Specifications

Power Supply	18 to 27 VDC/6 Watts max, 0.4 Amps max or 1 phase 50/60 Hz 115/230 VAC +10% - 15%/0.2/0.1 Amps
Accessory Power	Only if unit is AC powered/24 VDC ± 5%/100 mA max
Temperature	Operating: 32° F to 131° F (0° C to 55° C) Storage: -40° F to 158° F (-40° C to 70° C)
Display Outputs	Two parameters simultaneously
Display digits	6 for Rate, 10 for Total
Flow Input A	
Type	Current sinking (contact closure or npn transistor to ground)
Impedance	5.8 KΩ pull-up resistor to + 5 VDC
Logical Voltages	0.0 to 1.3 VDC or 2.8 to 24 VDC
Response	0 to 40 Hz max with 10 msec minimum pulse width 0 to 400 Hz max with 1.5 msec minimum pulse width 0 to 7.5 KHz max with 50 µsec minimum pulse width
Inhibit Flow Input B	
Type	Current sinking (contact closure or npn transistor to ground) Flow input ignored when pulled low
Impedance	5.8 KΩ pull-up resistor to + 5 VDC
Logical Voltages	0.0 to 1.3 VDC low, 2.8 to 24 VDC high
Control Inputs	
Qty	5
Type	Current sinking (contact closure or npn transistor to ground)
Impedance	5.8 KΩ pull-up resistor to + 5 VDC
Logical Voltages	0.0 to 1.0 VDC low, 3.5 to 24 VDC high
Response	30 msec input
Control Input 1	Use: Unlatch totalizer set point output
Control Input 2	Use: Reset totalizer count
Control Input 3	Use: Unlatch rate hi/lo set point outputs
Control Input 4	Use: Unlatch totalizer set point output and unlatch rate hi/lo set point outputs
Control Input 5	Use: Reset totalizer count, unlatch totalizer set point output, and unlatch rate hi/lo set point outputs
Analog Output	
Type	4-20 mA isolated
Voltage	12 to 27 VDC
Response	0.5 seconds
Accuracy	± 0.1 % at 25° C/± 0.25 % over temperature range
Resolution	0.05% (11 bits)
Control Outputs	
Qty	4
Type	Current sinking (npn transistor to ground)
Rating	150 mA @ 30 VDC blocking maximum



Figure 1. Model 1030FW Indicator/Totalizer

Control Output 1	
Response	0 to 10 Hz max with 50 msec minimum pulse width 0 to 200 Hz max with 2 msec minimum pulse width 0 to 1.5 KHz max with 125 µsec minimum pulse width
Use	Scaled totalizer pulse output with designated pulse width
Control Output 2	Use: Totalizer set point output/latched, or timed from 0.1 to 999.9 seconds
Control Output 3	Use: Low rate set point output/follow flow, be latched, or timed from 0.1 to 999.9 seconds
Control Output 4	Use: High rate set point output/follow flow, be latched, or timed from 0.1 to 999.9 seconds
Communications	
Type	RS-485
Baud	300, 600, 1200, 2400, 4800, 9600, 19200
Parity	space, even, or odd
Protocol	Opto-22 compatible

Physical Specifications

Display	Vacuum fluorescent
Panel Mount	NEMA 4X front panel with gasket for mounting
Wall Mount (opt.)	NEMA 4X enclosure with NEMA 4X front panel
Wiring	14 AWG maximum
Weight	Panel Mount: 2 lbs Wall Mount: 7 lbs

Ordering Information

Part #	Description
60380G281	Model 1030 FP panel mount
60380G283	Model 1030 FW wall mount

Dimensions

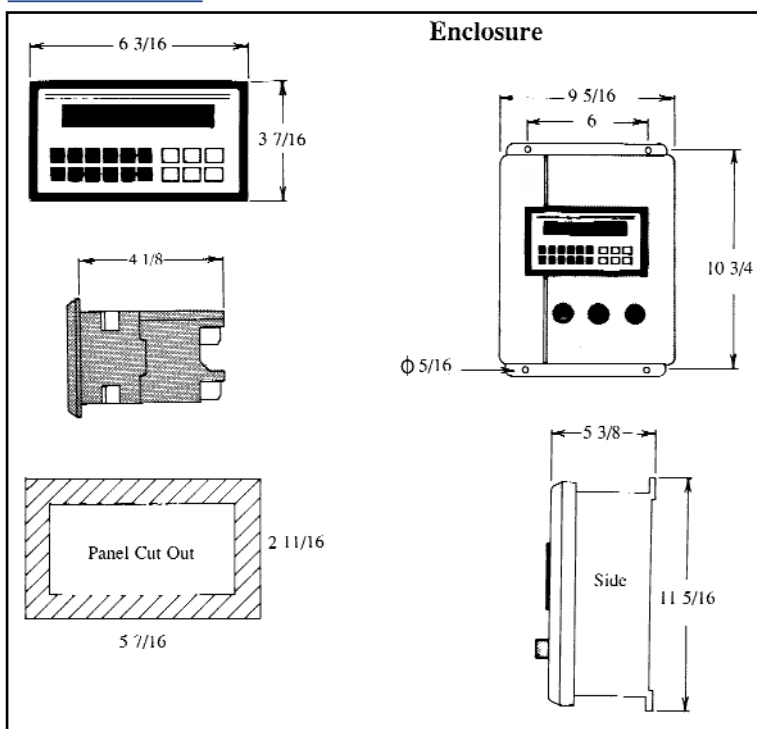


Figure 2