nanoFLOW

Industrial & Process Water Sample Flow Measurement & Regulation

Product Description

The Pyxis Nano-Flow Control Module is a stand-alone water flow measurement and control solution designed for use in critical cooling and process-water sample flow applications. This unique platform provides precise flow measurement and regulation and may be installed upstream of inline sensors in water systems that are subject to pressure and flow variation challenges. The Nano-Flow module is offered in a convenient and easy to integrate micro-panel mounted format for rapid installation, setup, and maintenance. The micro-panel design is equipped with the Pyxis FS-100 ultrasonic flowmeter with display, which directly controls a pre-mounted regulating valve through a simple to program user interface.

The new Pyxis FS-100 is a state-of-the-art ultrasonic flowmeter that operates on the principle of transit time difference with a measurement range of 0 – 3,000 mL/min and resolution of 1mL. The sensors advanced PCB design offers built-in temperature compensation to eliminate the effect of temperature with instantaneous, accumulated, and controlled water flow based on user setpoint within the sensor itself.

The flow control module also incorporates an electric box for panel power supply, internal regulating valve control and FS-100 output flow signal wiring with both 4-20mA and RS-485 Modbus for connection to any OEM controller, PLC or DCS.

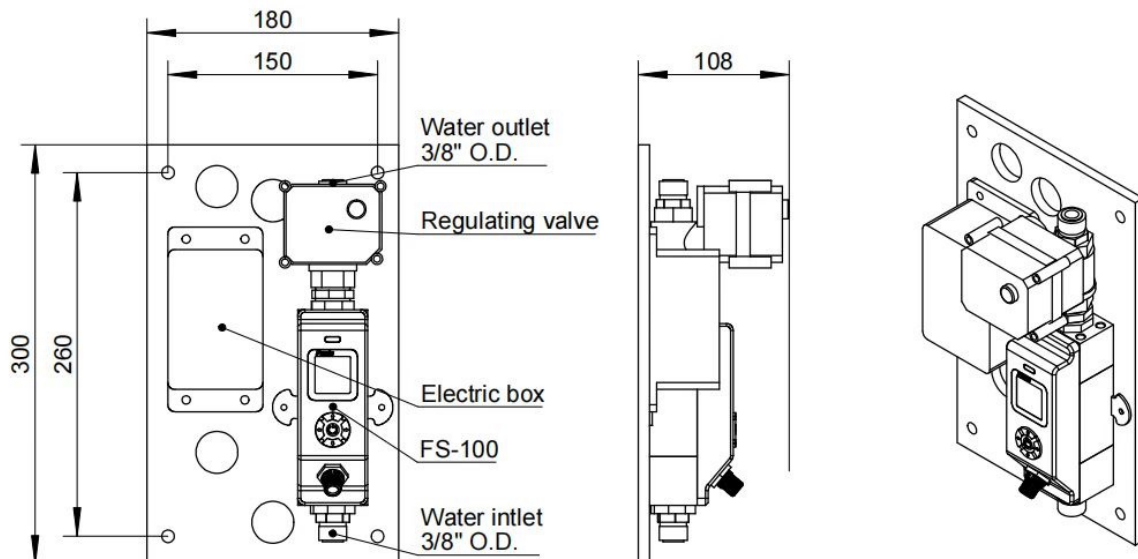*NanoFlow™ Control Module (P/N: 21329)*

Features

- Panel Mounted for Simple Installation and Startup
- Ultrasonic Flow Meter with Local Display capable of 0 – 3,000 mL/minute measurement
- Pre-wired regulating valve controlled via user programmed ultrasonic flow meter setpoint
- Dual Flow Meter Signal Outputs: isolated 4–20 mA and RS-485 Modbus
- Real - time flow rate trend chart
- Built-in temperature sensor automatically compensates the effect of temperature on flow-rate
- Monitor and display instantaneous flow rate and accumulated volume
- Large color LED indicator for operational state indication

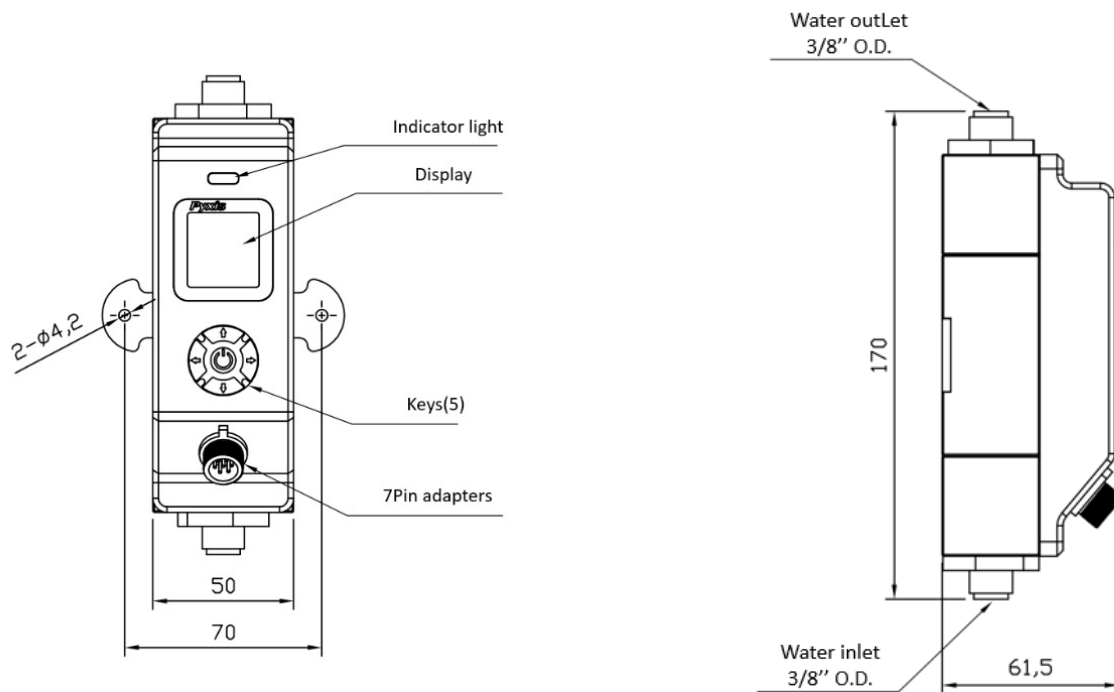**Contact Us at (866) 203-8397 or order@pyxis-lab.com**

Specifications

Item	Nano-Flow Control Module
P/N	21329
Supported Fluid	Liquids (Water)
Fluid Temperature	4–49 ºC (40–120 ºF)
Sample Inlet Pressure	1.5–100psi (0.01–0.69MPa)
Rated Flow Range	0–3,000mL/min
Resolution	1mL/min
Maximun Error	±2% of the Value
Display	1.44" Color 128x128 Resolution
Analog Output	4-20mA for Flow Rate, 4-20mA for Regulating Valve (Internally Connected)
Digital Output	RS-485
Sample Inlet/Outlet	3/8inch OD
Valve Control Method	4-20mA from FS-100
Power Supply	24VDC, 6W
Operation Temp.	32–122 ºF (0–50 ºC)
Storage Temp.	-4–158 ºF (-20–70 ºC)
Dimension (HxWxD)	300mm H x 180mm W x 108mm D
Approx. Weight	~ 1.8kg
Humidity	5–95% No Condensation
Protection	IP-65 Panel Display / IP-67 Regulating Valve
Regulation	CE/RoHS

NOTE (1) The flow control module supports only one 4-20mA (flow rate) output for connection to another device. A second 4-20mA output is internally connected and used to control the regulating valve.

Dimensions

Dimensions

Indicator light
Display
2-φ4,2
Keys(5)
7Pin adapters
50
70

Water outLet
3/8'' O.D.
170
Water inlet
3/8'' O.D.
61,5

Order Information	Part Number
NanoFlow Control Module *(Ultrasonic Flow Module Panel)*	21329
FS-100 *(Ultrasonic DLow Meter with Display)*	54200
NanoFlow Motorized Valve *(Replacement)*	21972
NanoFlow Electric Control Box *(Replacement)*	22123
CE-FE-4.9 *(Flying Lead Cable with Female 7-Pin 1.5m)*	50762
MA-AC-7US *(Power Outlet Adapter Cable USA/Type B)*	26398
MA-AC-7EU *(Power Outlet Adapter Cable EU/DIN)*	28787