LEVIFLOW Single-Use Flow Meters and

LEVIFLOW Sensor Monitor



Clear and Accessible Flow Data

The LEVIFLOW Sensor Monitor provides real-time flow readings on an easy-to-read digital LED display. This ensures you have immediate access to critical process information.



Versatile Output Options

Seamlessly integrate the LEVIFLOW into your existing systems. The monitor offers both a 4-20mA analog output and a digital frequency output, providing flexibility for various control and monitoring setups.



High-Precision Measurement

Obtain accurate and reliable flow data with an error margin of approximately 1% of the reading. This level of precision is essential for critical biopharmaceutical processes.



Robust Performance

Maintain consistent and accurate measurements even in challenging conditions. The LEVIFLOW's digital signal processing technology enhances its ability to handle bubbles within the fluid stream.



Key Advantages of LEVIFLOW Single-Use Flow Meters

In Biopharmaceutical Applications

LEVIFLOW single-use flow meters offer advanced ultrasonic flow measurement capabilities for critical biopharmaceutical processes. The system leverages two piezoelectric transducers to assess flow based on transit time differences of ultrasonic waves, ensuring accurate readings with an error margin of approximately 1%. This high precision allows for better process control and optimization. The integrated sensor monitor displays real-time data on a digital LED screen and provides both analog and digital outputs for seamless integration with existing control systems, offering flexibility and streamlining data acquisition. Designed with biocompatible, gamma-sterilizable materials, LEVIFLOW eliminates cross-contamination risks and minimizes particle generation, enhancing safety and product quality.



Sensor Specifications

Sensor Type/Characteristics	FM-LFS	-03SU	FM-LFS-06SU	FM-LFS-10SU	FM-LFS-15SU	FM-LFS-20SU	
Flow Range [Ipm]	0 – 0.8		0 – 8	0 – 20	0 – 50	0 – 80	
Triclamp Fitting Size	3/8inch ((ID = 6.4 mm)	3/8inch (ID = 6.4 mm)	1/2inch (ID = 9.4mm)	linch (ID = 22.2mm)	linch (ID = 22.2mm)	
Measurement Path ID in [mm]	2.5		6	10		20	
Accuracy of Reading	> 6ml/min: ±1%		> 1.7I/min: ±1%	> 4.7l/min: ±1%	> 10.6l/min: ±1%	>18.8I/min: ±1 %	
Repeatability < Accuracy/2	< 6ml/min: ±0.06ml/min		< 1.7I/min: ±17mI/min	< 4.7l/min: ±47ml/min	< 10.6l/min: ±106ml/min	<18.8I/min: ±188mI/min	
Wetted Surface Area [cm2]	29.5		32.2	53.2	141.2	173.5	
Wetted Surface Area [ml]	4		4.8	12.3	61.7	95.8	
Weight [g]	42		43	61	96	125	
Pressure Drop Coefficient	16.8		0.88	0.07 5	0.0101	0.0035	
C at 20°C							
$\Delta P = C \times Q2$; $Q = Flow [lpm]$,							
$\Delta P = Press. Drop [kPa]$							
Fluid Temperature		Normal range: 1	0 – 60°C (50 – 140°F)	,			
Ambient Temperature		0 – 40°C (32 –	104°F)				
Maximum Fluid Pressure 0 - 0.5MPa		0 - 0.5MPa (0	(0 - 5bar, 0 - 72.5psi)				
Kinematic Viscosity 0.8 – 40mm:		0.8 – 40mm2/s	/s (0.8 – 40cSt)				
Sound Speed		1000 – 2200m/	'S				
Wet Materials		Polypropylene (FDA, USP VI, ADI free), Gamr	na robust for up to 40kGy			
Sensor Enclosure Classification		IP-65 (for conne	ected sensor)				
Cable Jacket Material		PVC					
Cable Length (re-usable cable)		9ft/3 meter					
Electrical Connectors		Circular type (IP	-67), lock-release mounting				

Pendotech Leviflow Monitor Specifications

Characteristics	Descriptions or Values
Power Supply	24VDC +/- 10%
Current/Inrush (Start-Up) Current	150mA / Peak of 3.8A within 210µs
Ambient Temp.	0-40°C (32-104°F)
Humidity Range	30-85% R.H. (no condensation)
Interfaces	Analog Milliamp: Analog Output 4-20mA (20 mA set to max flow automatically) Digital as Frequency (max flow set tp 1KHZ)
Weight	485g
Dimensions (W x L x H) cm	13.65 x 19.05 x 4.45

Ordering Information	Order Number	
Leviflow single-use flow sensor to 0.8LPM	FM-LFS-03SU	
Leviflow single-use flow sensor to 8LPM	FM-LFS-06SU	
Leviflow single-use flow sensor to 20LPM	FM-LFS-10SU	
Leviflow single-use flow sensor to 50LPM	FM-LFS-15SU	
Leviflow single-use flow sensor to 80LPM	FM-LFS-20SU	
Leviflow Sensor Interconnect Cable, 3m, PVC	FM-LFI-C-1-30	
Leviflow Sensor Interconnect Cable, 6m, PVC	FM-LFI-C-1-60	
Leviflow Sensor Monitor with display (includes power supply, Leviflow interconnect cable, stand; also includes interface cable or connector of choice)	FMT-LFS	
Single Use and Low Flow Ultrasonic flowmeter to PressureMAT analog input, 6ft	PDKT-US-PMATA	
Micro connector with integral cable with flying leads	MC-6897K35	
Levitronix single channel DIN rail transmitter	FM-LF-CONVERT	
Leviflow Wall Mount Extension Cable, 1M	FM-LF-EXT-1M	
Leviflow Wall Mount Extension Cable, 3M	FM-LF-EXT-3M	
Leviflow Wall Mount Extension Cable, 6M	FM-LF-EXT-6M	
Flow Sensor Stand	LEVI-STAND	



Single-use flow sensor



LEVI-STAND shown with single-use flow sensor

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For more information