

SLA Series Biotech

Mass Flow Controllers & Meters

Efficiency and simplicity combine to improve bioprocessing performance with the new SLA Series *Biotech* MFC. Built on the proven performance of the industry-leading SLA Series, two options packages - performance or premium - incorporate features to reduce the number of MFCs needed in equipment, simplify MFC purchasing and satisfy regulatory requirements.



SLAMf for Hosedown & Washdown Applications

SLA5800

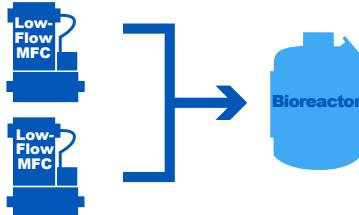
EtherNet/IP



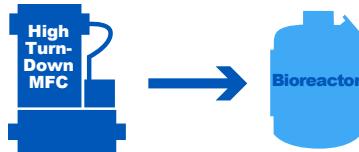
High Turndown Ratio

- 250:1 FS Flow Rates 5 sccm-150 slpm
- 150:1 FS Flow Rates > 150 slpm
- The high turndown (control range) ratio of this biotech-focused MFC controls a wider range of gas flows, reducing the number of MFCs needed to cover your full range.

TRADITIONAL MFC: Low-Flow & High-Flow MFCs Required



SLA Biotech MFC: Simplified Gas Box Configuration



TRADITIONAL MFC: Shut-off Valve Required



SLA Biotech MFC: Simplified Gas Delivery System



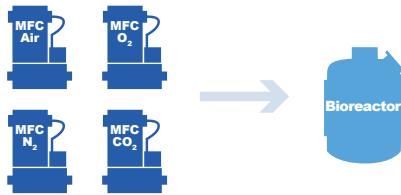
Extremely Low Leak Rate

- <0.005 sccm for FS Flow Rates 5 sccm -150 slpm
- <15.6 sccm for FS Flow Rates >150 slpm
- An enhanced control valve eliminates the need for a separate shut-off valve in the gas delivery system.
- One less system component reduces design, testing and validation time, and system footprint.

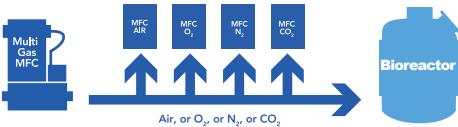
Pre-calibrated Multi-gas Pages

- When combined with a high turndown ratio, the SLA Series *Biotech* can be field-configured, reducing the number of MFC configurations required by up to 90%.
- Air, CO₂, N₂ & O₂ flows can be changed insitu to reduce the variety of MFC spares kept in stock.

TRADITIONAL MFC: Each MFC – Unique Configuration for Every Gas & Range



SLA Biotech MFC: Each MFC – Same Configuration with Wide Turndown & Multi-Gas



Optional Premium Materials & Certificates

Class VI Elastomers	Certifications
FDA/USP Class VI and ADI-Free O-rings and Valve Seats *Certificate Included	<ul style="list-style-type: none"> Materials of Construction (wetted path) 2.1 Material Cert NIST/ICC Calibration Traceability

		SLA5800 & SLAMF Series Standard	SLA5800 & SLAMF Series Biotech Performance	SLA5800 & SLAMF Series Biotech Premium
Zero Stability	±0.20% FS per year	✓	✓	✓
Accuracy	±0.9% of SP (20-100% FS), ±0.18% of FS (<20% FS)	✓	✓	✓
Repeatability	0.20% SP	✓	✓	✓
Advanced Diagnostics	Ensures device is operating within user specified limits for high process yield uptime.	✓	✓	✓
Analog & Digital I/O	DeviceNet, EtherCAT, EtherNet/IP, Profibus, PROFINET, RS-485	✓	✓	✓
High Turndown Ratio	• 250:1 FS flow rates 5 sccm -150 slpm • 150:1 all other FS flow rates		✓	✓
Extremely Low Leak Rate Valve	• <0.005 sccm for < 150 slpm • <15.6 sccm for >150 slpm		✓	✓
Enhanced Sensor Design	Meets industry standards for cleanliness		✓	✓
Pre-calibrated Multi-gas Pages	Air, CO ₂ , N ₂ , O ₂ gas pages can be changed in situ to reduce the variety of spare instruments stocked		✓	✓
Class VI Elastomers	FDA/USP Class VI and ADI-Free O-rings & Valve Seats			✓
Certifications	Materials of construction (wetted path) • 2.1 Material Cert • NIST/ICC Calibration Traceability			✓

Options Packages

Performance Package

- Includes enhancements reducing cost of operation

Premium Package

- Performance Package features plus:
 - Premium materials and associated certificates