

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

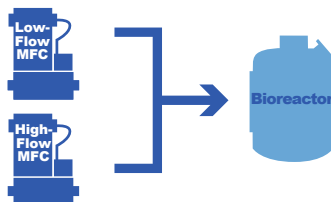
EtherNet/IP®



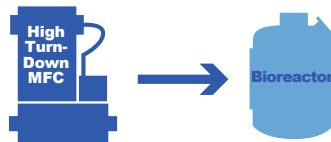
High Turndown Ratio

- 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 and simplifying gas configuration.

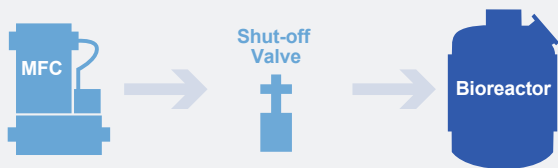
TRADITIONAL MFC: Low-Flow & High-Flow MFCs Required



SLA *Biotech* MFC: Fewer MFCs Required to Cover the Full Range



TRADITIONAL MFC: Shut-off Valve Required



SLA *Biotech* MFC: Simplified Gas Delivery System



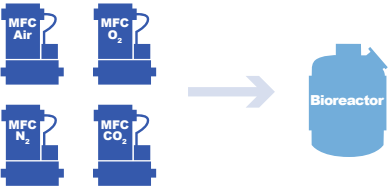
Extremely Low Leak Rate

- <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.

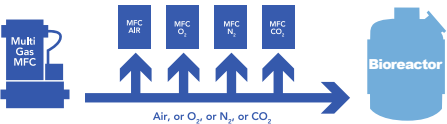
Pre-calibrated Multi-gas Pages

- 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 is a Unique Configuration & Part Number for Every Gas & Range



SLA *Biotech* MFC: Each MFC is the Same Configuration but with Wide Turndown & Multi-Gas Configurability for Greater Flexibility



Optional Premium Materials & Certificates

Class VI Elastomers	Certifications
FDA/USP Class VI and ADI-Free O-rings and Valve Seats *Certificate Included	- Materials of Construction (wetted path) 2.1 Material Cert - NIST/ICC Calibration Traceability

		SLA5800 & SLAMf Series Standard	SLA5800 & SLAMf Series <i>Biotech</i> Performance	SLA5800 & SLAMf Series <i>Biotech</i> 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 insitu 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