

BIOPROCESSING TECHNOLOGIES REFERENCE GUIDE

BIOPROCESSING SYSTEMS			FLUID MANAGEMENT		FLUID MANAGEMENT
Semi-Automated	Fully-Automated	Fully-Automated	Fully-Automated	Fully-Automated	Quantitative Fluid Management
SciLog® NFF System	SciLog® TFF System	SciLog® Filter & Dispense Systems	SciLog® Inline Dilution System	SciLog® Cryobag Filler System	SciLog® WeighStation Family
Single use system for depth, sterile, viral, and bioburden reduction filtration Optimizes filter throughput with patented Rate-Pressure control mode Monitors TMP using SciLog single use pressure sensors Easy integration with existing scales	Fully automated single use system, sized to fit your application Automated TMP control Can be integrated into SCADA and MES systems Works with hollow fiber or cassette filters	Available in both bag & bottle designs Automates final filtration and filling of bulk drug substance Fills up to 12 x 20 L bags and/or bottles gravimetrically per dispensing spine Completely closed single-use flow path protects both the operator and product	Automated control to ensure output remains in specification (pH or conductivity) Can be used to create bulk buffer or feed processing equipment directly. Monitors plant WFI supply. Can connect directly to WFI drop or use with a break bag Incorporates inline single-use static mixer technology	Fills up to 24 x 1 L cryobags gravimetrically for cell banking or cell-based products Integrated sealing bar seals all bags at once Integrated chiller and stir plate allow for formulation directly on the system Label printer automatically prints labels	The Scilog® WeighStation™ family is an assortment of mobile, compact, bioprocessing container holders with integrated scales for gravimetric fluid handling Mobile design/small footprint Gravimetric application control Optional displays Multiple configurations Operator friendly design Easily integrates with existing systems

INTELLIGENT LAB SYSTEMS					
Complete Cell Culture Harvest System	Normal Flow Filtration (NFF) System	Precision Metering System	Smart Dispenser System	Cell Culture Maintenance System	Tangential Flow Filtration (TFF) System
HarvestClear™ Filtration System	FilterTec /FilterTec Plus	ChemTec	LabTec	MabTec	PureTec
A turnkey solution for rapid controlled clarification of bioreactors with volumes	Filterability studies and VMax determination	Stored methods for linear or exponential feed by weight or volume	Rapid, high precision dispensing / filling, mL to L	Promote high-density cell culture though automated seed, feed and	Ideal for lab-scale UF/MF/DF - concentration and diafiltration
Reduced set-up time Integrated SciPres® pressure sensors enable natented R/P Stat Method which	Increase DEF filter utilization up to 35% 3 pressure sensor and balance hook-ups for filter trains Safe, walk-away system operation.	Validated methods for pH control and titration, analytic (UV, turbidity) device tracking, preparative chromatography, and buffer weight maintenance Walk-away automation with remote or user defined alarms and interlocks Programmable control of two 6-port rotary valves	Automated dispensing by weight or by volume In-line filter sterilization - senses filter plug-up Sample weighing and auto-diluting - weight ratio capability Performance validation sent with	perfusion strategies Methods and alarms to protect your entire cell culture processes Modular compact design enhances current setups Seamless integration to any bioreactor to enhance performance	Controls and monitors TMP (transmembrane pressure) and feed rate Set end points and alarm for walk-away operation



BIOPROCESSING TECHNOLOGIES REFERENCE GUIDE (cont.'d)

FLUID MANAGEMENT					
Fluid Storage	Fluid Storage	Fluid Storage	Fluid Transfer	Fluid Transfer	Connector Kits
DuraPure™ Bag Systems	klave-it™ Bags	SpinBag	Tubing	Custom Manifolds	Accessories
			066		A CCC
DuraPure™ bags are available in the following sizes: 250mL, 1L, 5L, 10L, 20L, 50L, 100L Each system is designed to seamlessly integrate with the rest of your process mitos-P platinum-cured tubing with molded junctions and sanitary fittings TPE tubing with molded junctions and sanitary fittings Contact us to discuss your custom needs	Autoclavable bags are made of select Kynar® PVDF film designed to maintain flexibility, strength and impact resistance after sterilization by autoclave Available in pillow style Low permiability Can be filled and then autoclaved	The compact SpinBag Mixing System offers the advantages of single-use in a bench top mixing solution Constructed of fully validated DuraPure C93 film Stores flat and ideal for bioprocessing applications Easily integrated with filters, sensors and pumping systems Platinum-cured silicone magnetic stir	A range of platinum-cured silicone tubing, etched with lot and part numbers for traceability Ideal for molding with other silicones into manifold assemblies Other tubing products include a number of reinforced tubings	Single-use systems tailored to your application Proprietary technology allows any configuration of Ys, Ts, crosses, reducers, and elbows, with virtually unlimited lengths between molds Molded junctions are stronger, eliminate entrapment, and offer smooth, unrestricted flow Contact us to discuss integrating bags, tubing, sensors and connectors to suit your needs. Can also be made with zip-ties	Full range of connectors from a wide array of suppliers Allows flexibility and connectivity within your process One stop shop convenience to meet all of your connection needs

SINGLE-USE SENSORS	NGLE-USE SENSORS FILTRATION			
Sensors and Sensor Monitors	Sterilization / Bioburden Filters	Pharmaceutical Prefilters	Gas Filters	Integrity Testing Equipment
SciPres SciCon SciTemp	PROPOR Range	PROCLEAR Range	TETPOR Range / PEPLYN Air	Porecheck / Valairdata
Pre-calibrated sensors for single or extended-use Each sensor is pre-calibrated with a	Fully validated and integrity testable bioburden reduction, sterile filtration and mycoplasma removal	Effective reduction of particulate and microbial contaminants in pharmaceutical liquids	Extensive range of membrane and depth filters for all air, gas and venting applications	Porecheck 4 - Water intrusion, pressure decay and bubble point testing of membrane liquid filters
Factory calibration ensures the highest level of accuracy and is stored on each sensor's memory chip for out of the box, plug and play use	All PROPOR products incorporate fast flowing and low binding PES membrane	Ideal for protection of downstream membrane filters	Unrivalled flow rates for decreased system size	Valairdata - Aerosol challenge testing of sterile gas filters
	Available in cartridge and capsule formats	Wide choice of filter materials give flexibility in all processes	Sterile filters are fully validated and integrity testable	
Custom calibrations available				
Available in 5 connection variants				

Parker Hannifin Corporation Bioscience Filtration - N.A. toll free: +1 877 784 2234 phone: +1 805 604 3400 fax: +1 805 604 3401 email: bioscience.na@parker.com

Parker Hannifin Manufacturing Ltd Bioscience Filtration - EMEA phone +44 (0)191 4105121 fax +44 (0)191 4105312 email: bioscience@parker.com

© 2016 Parker Hannifin Corporation. All rights reserved. GL_BP_19_02-16_1I