

Celsius[®] S³ System

Benchtop System For
Controlled Freeze and Thaw



Benefits

- Scale-up
- Scale-down
- Stability studies
- Development studies

Product Information

The Celsius[®] S³ is the only small-volume Controlled Freeze-Thaw System in disposable containers that is scalable to production volume. This system is a tool to execute freeze-thaw process development and stability studies using a minimal amount of product.

Scalability

The Celsius® S³ System models a 16.6 L pilot-scale and 100 L production system with a minimal amount of product. Using the same freeze and thaw pathlength and identical materials of construction in all Celsius® Pak containers, the Celsius® S³ System ensures unmatched scalability between all scale systems.

Ease of Use

The CryoPilot Control Unit provides automated operation and data collection. The Celsius® S³ System freezes and thaws from 1 to 10 product samples per run. Celsius® Pak is available in 30 mL and 100 mL with different filling port and thermowell configurations.

Improved Process Validation

Celsius® S³ System offers excellent batch to batch reproducibility and consistent product stability after freezing, thawing and storing. The Celsius® S³ System provides documented and reproducible freeze-thaw processes, thus facilitating validation of your freeze-thaw operations.

Technical Data

Specifications

	Celsius® S ³ Freeze-Thaw	CryoMixer Jr.
Dimensions	With mounting base 16.75" × 14" × 21" (42.5 cm × 35.6 cm × 53.3 cm)	19.75" × 23" × 3.5" (50.2 cm × 58.4 cm × 8.9 cm)
Weight	40 lb (18 Kg)	52 lb (24 Kg)
Electrical	N/A	EU: 230 V, 50 Hz, 5 A, 1 Phase USA: 110 V, 60 Hz, 5 A, 1 Phase
Exterior Material	302 304 Stainless Steel Shell; Clear	PVC Enclosure Hood

	Cryopilot Control Unit
Dimensions	18.5" × 16.75" × 28.5" (470 mm × 426 mm × 724 mm)
Weight	205 lb (93 Kg)
Exterior Material	304 Stainless Steel and PVC
Heat Transfer Fluid (HTF)	Dow Syltherm HF
Temperature Range	CryoPilot nominal: +40°C to -60°C
Power Requirements	EU: 230 V, 50 Hz, 16 A breaker minimum, 1 Phase USA: 230 V, 60 Hz, 20 A breaker minimum, 1 Phase

	30 mL Celsius® Pak	100 mL Celsius® Pak
Film	S71	S71
Product Contact Layer	EVAM ¹	EVAM ¹
Gas & Moisture Barrier Layer	EVA EVOH EVA ²	EVA EVOH EVA ²
External Robust, Handling Layer	EVA	EVA

¹ Ethylene Vinyl Acetate Monomaterial

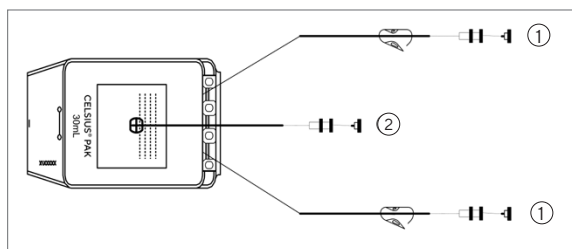
² EVA-Ethylene Vinyl Acetate, EVOH-Ethylene Vinyl Alcohol. A type III DMF is on records with the FDA.

Celsius® S³ System

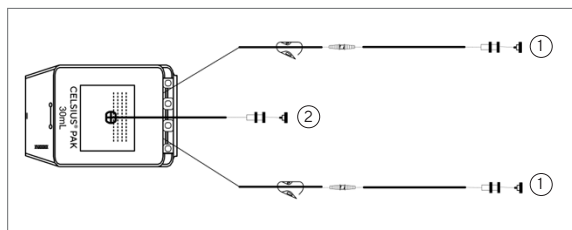


Ordering Information

Celsius® Pak



Part Number	Description	Tubing	Port 1	Port 2	Qty./Box
FZB114804	Celsius® Pak, 30 mL, Thermowell	EVA	¼" x ⅝" x 10 cm (4") Female LL + plug, pinch clamp		10
FZB114839	Celsius® Pak, 100 mL, Thermowell	EVA	¼" x ⅝" x 10 cm (4") Female LL + plug, pinch clamp	Thermowell sealed end tube ⅜" x ¼" x 10 cm (4") Female LL + plug	10



Part Number	Description	Tubing	Port 1	Port 2	Qty./Box
FZB114866	Celsius® Pak, 30 mL, Thermowell, C-Flex®	EVA + Clear C-Flex® 374	⅛" x ¼" x 15 cm (6") + Female LL + plug, pinch clamp	Thermowell sealed end tube ⅜" x ¼" x 10 cm (4") Female LL + plug	10
FZB114908	Celsius® Pak, 100 mL, Thermowell, C-Flex®	EVA + Clear C-Flex® 374	⅛" x ¼" x 15 cm (6") + Female LL + plug, pinch clamp	Thermowell sealed end tube ⅜" x ¼" x 10 cm (4") Female LL + plug	10

Some configurations are made to order. Specifications and material are subject to change.

Hardware

Part Number	Description
FTH-CS00000-0001	Celsius® S ³ System with US Voltage
FTH-CS00000-0002	Celsius® S ³ System with EU Voltage


C-Flex® is a registered trademark of Saint-Gobain Performance Plastics Corporation.

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Specifications subject to change without notice.

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