# FTS Systems BioCool™ IV40

# **Controlled Rate Freezer**



## **Features**

- Mechanically refrigerated.
- Temperature control range of -40 to 30 °C.
- Built-in magnetic stirrer and vortex breaker.
- Multi-functional temperature controller.

#### **Benefits**

- Eliminates costs and hazards of expendable refrigerants.
- Freeze a wide variety of biological material.
- Ensures isothermal bath conditions.
- Provides accurate temperature control with temperature indication and ramp control.

#### **Optional Accessories**

SR-36	SR-12		SR-15
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Maximum Capacity	36 straws (.25cc or .5cc)	12 ampules up to 5 ml	15 ampules up to 5 ml
Material	304 SS	316 SS	304 SS
Description	Straw Rack	Ampule Rack	Ampule Rack
Model	SR-36	SR-12	SR-15

#### **Performance Specifications**

Maximum Low Temperature	-40 °C
Temperature Control Range	-40 to 30 °C
Temperature Control Stability*	± 0.1 °C
Temperature Indication Display	0.1 °C
Bath Volume	1.5 L
Magnetic Stirrer	Included
Vortex Breaker	Included

**Note**: Performance specifications are based on SP Scientific test data from units using methanol operating at an ambient room temperature of approximately 22 °C (72 °F).

#### Maximum Cooling Rates<sup>†</sup>

20 to -20 °C	3 °C / minute
-20 to -30 °C	2 °C / minute
-30 to -40 °C	1 °C / minute

## **Electrical Requirements**

60 Hz Option	120 V, 9 A <sup>‡</sup>
50 Hz Option	220 V, 5 A <sup>‡</sup>

**Note:** All equipment configured with the 60 Hz option is supplied with a 5-15P NEMA configuration (i.e., (1...)). All equipment configured with the 50 Hz option is supplied with a non-terminated AWG 18-3 power cord.

#### **Dimensional Data**

Width	10.5 in (26.7 cm)
Depth	20.5 in (52.1 cm)
Height	14.5 in (36.8 cm)
Weight	57 lbs (25.9 kg)
Chamber Diameter	4.75 in (12.1 cm)
Chamber Depth	5 in (12.7 cm)
Height to Work Surface Above Bench Top	11 in (27.9 cm)

Disclaimer: The BioCool™ is not an FDA-registered medical device.

\* Temperature control is accomplished by means of a PID microprocessor controller which offers rapid temperature stabilization and displays a bright, continuous read of temperature with 0.1 °C indication.

<sup>†</sup> Rates calculated at 22 °C (72 °F) ambient with clean methanol.

<sup>t</sup> Maximum continuous amperage drawn by the equipment.

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