Refrigerated Circulator - Compact Lab Chiller - -20°C - 4.5 L Tank, 22 L/min

Model **MSRECL20-4.5SWISS** | Brand **Master Science**





The Master Science Refrigerated Circulator is a small chiller that cools liquid from ambient temperature down to -20 °C and pumps it through condensers, reactors and other connected equipment. PID control keeps the temperature stable to ±0.3 °C.

KEY HIGHLIGHTS

- Saves bench space
- Steady temperature
- Low upkeep
- Adapts to the load
- Easy filling and draining

AT A GLANCE

-20 °C to ambient TEMPERATURE RANGE	**700 W** REFRIGERATING CAPACITY
±0.3 °C stability. FLUCTUATING CONDENSER TEMPERATURE	**±0.3 °C** TEMPERATURE STABILITY

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

Scan to view online

Overview

It needs only about 50 × 23 × 50 cm of space, so it can stand on a bench, under it, or inside a fume hood. The refrigerant used is environmentally friendly and non-toxic.

> For a smaller 2.5 L unit with touch screen, see the Master Science low temperature circulator.

Overview

- 4.5 L capacity
- Liquid level window
- Overflow and drain ports

Key Benefits

Saves bench space
the Master Science Refrigerated Circulator is only 220 mm wide.

Steady temperature
PID control to ±0.3 °C.

Low upkeep
maintenance-free pressure and suction pump.

Adapts to the load
pump pressure and flow adjust automatically.

Easy filling and draining
overflow and drain ports on the tank.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSRECL20-4.5SWISS
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SKU	MSRECL20-4.5SWISS
Temperature Range	**-20 °C to ambient**
Temperature Stability	±0.3 °C
Refrigerating Capacity	**700 W**
Pump Pressure / Suction	0.3 bar / 0.2 bar
Maximum Pump Flow	22 L/min
Tank Volume	4.5 L
Cooling Water Tubing	Silicone, standard 8 mm insulated tube
Communication	RS485 (optional)
Low Level Alarm	Optional
Heating Function	Optional
Temperature Display	LED, 0.1 °C resolution
Operating Environment	5 to 32 °C
Power Supply	220 V, 50 Hz

DIMENSIONS & WEIGHT

Dimensions (W × D × H)	220 × 420 × 495 mm

COMMON LABORATORY PROBLEMS AND HOW THIS CIRCULATOR HELPS

Common Laboratory Problems and How This Circulator Helps	How the Master Science Refrigerated Circulator answers common cooling issues:
Cramped fume hoods	compact body fits inside.
Fluctuating condenser temperature	±0.3 °C stability.
Pump servicing	maintenance-free pump.
Messy tank filling	overflow and drain ports.

Applications

The Master Science Refrigerated Circulator serves
Rotary evaporator condensers Jacketed glass reactors Distillation and extraction setups Cooling of analytical instruments Chemistry and pharmaceutical laboratories

Cooling

- 700 W refrigeration
- -20 °C to ambient
- PID control

Pump

- Pressure and suction pump
- Up to 22 L/min
- Automatic flow adjustment

Optional Accessories

- RS485 communication interface
- Low level alarm
- Heating function