

The Thermo Scientific NESLAB ThermoFlex and NESLAB Merlin recirculating chillers provide a wide range of cooling capacity in a highly reliable, space-saving package for your critical application needs.

## Thermo Scientific NESLAB ThermoFlex and NESLAB Merlin Recirculating Chillers



**Ideal for diverse applications within the following markets:**

- Biotech
- Pharmaceutical
- Industrial
- Medical
- Research
- University

### Feature-Packed Compact Chillers

The Thermo Scientific NESLAB ThermoFlex and low temperature NESLAB Merlin recirculating chillers provide precise temperature control in the most demanding cooling applications. The feature-packed compact chillers include:

- Easy-to-use controls
- Effortless maintenance
- Improved cooling capacity
- Increased reliability

The environmentally-friendly, CFC-free refrigeration system provides reliable and powerful cooling. With a variety of pumps to choose from, you can configure a chiller that is ideal for your specific application requirements.

## Thermo Scientific NESLAB Merlin Recirculating Chillers

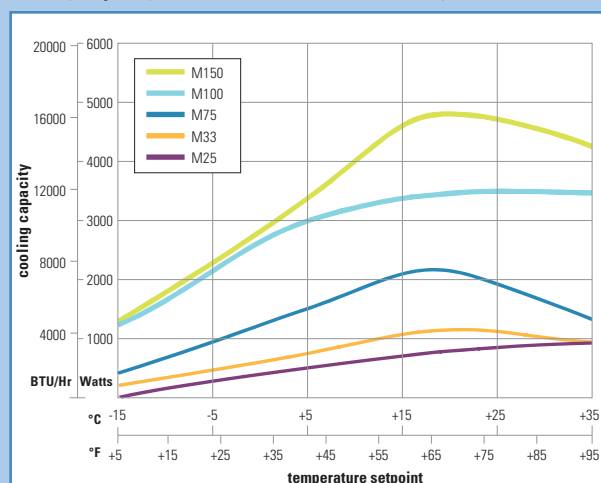


	<b>NESLAB Merlin M25</b>	<b>NESLAB Merlin M33</b>	<b>NESLAB Merlin M75</b>	<b>NESLAB Merlin M100</b>	<b>NESLAB Merlin M150</b>
<b>Setpoint Temperature Range</b>	-15°C to +35°C (+5°F to +95°F)	-15°C to +35°C (+5°F to +95°F)	-15°C to +35°C (+5°F to +95°F)	-15°C to +35°C (+5°F to +95°F)	-15°C to +35°C (+5°F to +95°F)
<b>Ambient Temperature Range</b>	+10°C to +35°C (+50°F to +95°F)	+10°C to +35°C (+50°F to +95°F)	+10°C to +35°C (+50°F to +95°F)	+10°C to +35°C (+50°F to +95°F)	+10°C to +35°C (+50°F to +95°F)
<b>Temperature Stability</b>	±0.1°C	±0.1°C	±0.15°C	±0.15°C	±0.15°C
<b>Refrigerant</b>	R-134a	R-134a	R-134a	R-404a	R-404a
<b>Setpoint Cooling Capacity</b> 60 Hz at +20°C	810 W / 2765 BTU	1250 W / 4266 BTU	2410 W / 8225 BTU	3500 W / 11946 BTU	5045 W / 17219 BTU
<b>Reservoir Volume</b>	1.8 liters (0.5 gallons)	1.8 liters (0.5 gallons)	1.8 liters (0.5 gallons)	1.8 liters (0.5 gallons)	1.8 liters (0.5 gallons)
<b>Physical Dimensions</b> (H x W x D)	59.7 x 32.1 x 53.0 cm (23.5 x 12.6 x 20.9 in)	59.7 x 32.1 x 53.0 cm (23.5 x 12.6 x 20.9 in)	66.4 x 41.3 x 61.0 cm (26.1 x 16.3 x 24.0 in)	77.2 x 54.0 x 74.3 cm (30.4 x 21.3 x 29.3 in)	77.2 x 54.0 x 74.3 cm (30.4 x 21.3 x 29.3 in)
<b>P1 — Positive Displacement Pump</b> 60 Hz	1.4 gpm @ 60 psi	1.4 gpm @ 60 psi	1.4 gpm @ 60 psi	—	—
<b>P2 — Positive Displacement Pump</b> 60 Hz	—	3.0 gpm @ 60 psi	3.0 gpm @ 60 psi	3.0 gpm @ 60 psi	3.0 gpm @ 60 psi
<b>Unit Weight</b>	53.5 kg (118 lb)	54.5 kg (120 lb)	79.8 kg (176 lb)	115.2 kg (254 lb)	115.2 kg (254 lb)

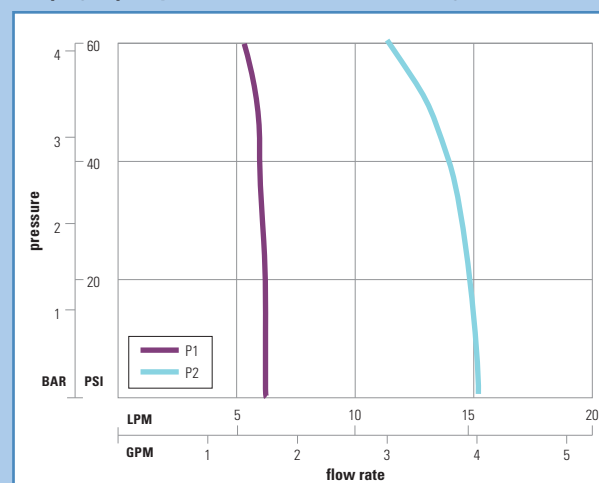
### Part Numbers for NESLAB Merlin Recirculating Chillers

Description	Thermo Scientific Part Number	Fisher Scientific Part Number
M25 LR 115/60 PD1	262212030000	13-265-500
M33 LR 115/60 PD1	263212030000	13-265-502
M33 LR 115/60 PD2	263212040000	13-265-503
M33 LR 208-230/60 PD1	263216030000	13-265-504
M33 LR 208-230/60 PD2	263216040000	13-265-505
M75 LR 208-230/60 PD2	264216040000	13-265-508
M100 LR 208-230/60 PD2	265216040000	13-265-511
M150 LR 208-230/60 PD2	266216040000	13-265-516

### Cooling Capacity for NESLAB Merlin Recirculating Chillers



### Pumping Capacity for NESLAB Merlin Recirculating Chillers



*Cooling capacity curves based on a 50/50 ethylene glycol/water mixture. Cooling capacity based on units with PD1 pumps with no backpressure. Other pumps will affect cooling capacity performance.*

# Thermo Scientific NESLAB ThermoFlex Recirculating Chillers



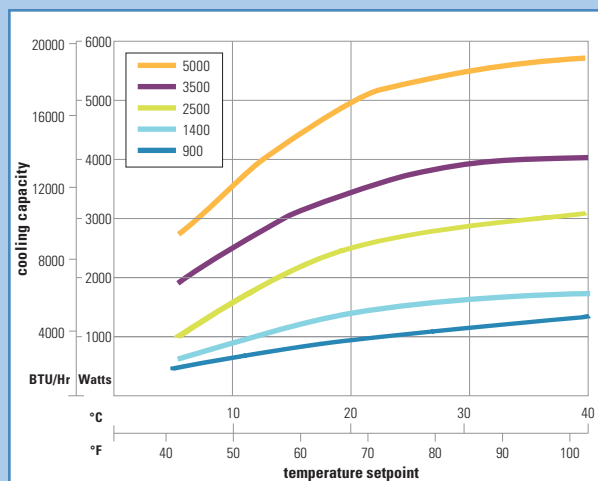
	NESLAB ThermoFlex 900	NESLAB ThermoFlex 1400	NESLAB ThermoFlex 2500	NESLAB ThermoFlex 3500	NESLAB ThermoFlex 5000
<b>Setpoint Temperature Range</b>	+5°C to +40°C (+41°F to +104°F)	+5°C to +40°C (+41°F to +104°F)	+5°C to +40°C (+41°F to +104°F)	+5°C to +40°C (+41°F to +104°F)	+5°C to +40°C (+41°F to +104°F)
<b>Ambient Temperature Range</b>	+10°C to +40°C (+50°F to +104°F)	+10°C to +40°C (+50°F to +104°F)	+10°C to +40°C (+50°F to +104°F)	+10°C to +40°C (+50°F to +104°F)	+10°C to +40°C (+50°F to +104°F)
<b>Temperature Stability</b>	±0.1°C	±0.1°C	±0.1°C	±0.1°C	±0.1°C
<b>Refrigerant</b>	R-134a	R-134a	R-134a	R-407c	R-407c
<b>Setpoint Cooling Capacity</b>					
60 Hz at +20°C	900 W / 3074 BTU	1400 W / 4781 BTU	2500 W / 8538 BTU	3500 W / 11953 BTU	5000 W / 17076 BTU
<b>Reservoir Volume</b>	7.2 liters (1.9 gallons)	7.2 liters (1.9 gallons)	7.2 liters (1.9 gallons)	7.2 liters (1.9 gallons)	7.2 liters (1.9 gallons)
<b>Physical Dimensions</b> (H x W x D)	69.4 x 36.1 x 62.5 cm (27.3 x 14.2 x 24.6 in)	69.4 x 36.1 x 62.5 cm (27.3 x 14.2 x 24.6 in)	73.7 x 43.7 x 67.3 cm (29.0 x 17.2 x 26.5 in)	98.8 x 49.0 x 78.2 cm (38.9 x 19.3 x 30.8 in)	98.8 x 49.0 x 78.2 cm (38.9 x 19.3 x 30.8 in)
<b>P1 — Positive Displacement Pump</b>					
60 Hz	2.1 gpm @ 60 psid	2.1 gpm @ 60 psid	2.1 gpm @ 60 psid	2.1 gpm @ 60 psid	—
<b>P2 — Positive Displacement Pump</b>					
60 Hz	4.1 gpm @ 60 psid	4.1 gpm @ 60 psid	4.1 gpm @ 60 psid	4.1 gpm @ 60 psid	4.1 gpm @ 60 psid
<b>Unit Weight</b>	59.2 kg (130.5 lb)	59.2 kg (130.5 lb)	79.6 kg (175.5 lb)	120 kg (264 lb)	120 kg (264 lb)

Specifications obtained at sea level using water as the recirculating fluid at a +20°C process setpoint, +25°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude or operating voltages will affect performance. Cooling capacity and amperage ratings based on units with PD1 pumps with no backpressure. Other pumps will affect cooling capacity performance. Specifications subject to change.

## Part Numbers for NESLAB ThermoFlex Recirculating Chillers

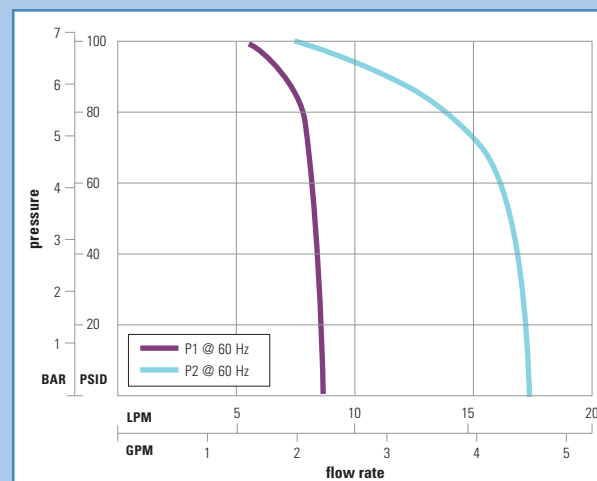
Description	Thermo Scientific Part Number	Fisher Scientific Part Number
TF9 B A 115/60 P1 IPR	101101010000006	13-266-130
TF9 B A 115/60 P2 IPR	101101110000001	13-266-131
TF14 B A 115/60 P1 IPR	111101010000011	13-266-134
TF14 B A 115/60 P2 IPR	111101110000008	13-226-135
TF25 B A 208-230/60 P1 IPR	121121010000001	13-266-500
TF25 B A 208-230/60 P2 IPR	121121110000001	13-266-502
TF35 B A 208-230/60 P1 IPR	131121010000000	13-265-520
TF35 B A 208-230/60 P2 IPR	131121110000001	13-265-522
TF50 B A 208-230/60 P2 IPR	141121110000001	13-265-524

## Cooling Capacity for NESLAB ThermoFlex Recirculating Chillers



Cooling capacity based on units with PD1 pumps with no backpressure. Other pumps will affect cooling capacity performance.

## Pumping Capacity for NESLAB ThermoFlex Recirculating Chillers



**Additional Thermo Scientific NESLAB Products and Accessories**

<b>RTE Recirculating Refrigerated Bath</b>	<b>Description</b>	<b>Fisher Scientific Part Number</b>	<b>Thermo Scientific Part Number</b>
RTE-7 D1 115/60	-25°C to +150°C standard controller	13-873-301	271103200000
RTE-7 D+ 115/60	-25°C to +150°C enhanced controller	13-873-302	271103200100
RTE-10 D1 115/60	-25°C to +150°C standard controller	13-873-305	272103200000
RTE-10 D+ 115/60	-25°C to +150°C enhanced controller	13-873-306	272103200100
RTE-17 D1 115/60 BST	-25°C to +150°C standard controller	13-873-308	273103200000
RTE-17 D+ 115/60 BST	-25°C to +150°C enhanced controller	13-873-310	273103200100
RTE-740 D1 115/60	-40°C to +150°C standard controller	13-873-312	274103200000
RTE-740 D+ 115/60	-40°C to +150°C enhanced controller	13-873-315	274103200100
<b>EX Refrigerated Heating Bath</b>			
EX-7 D1 115/60	Ambient +20°C to +200°C standard controller	13-873-316	275003200000
EX-7 D+ 115/60	Ambient +20°C to +200°C enhanced controller	13-873-318	275003200100
EX-10 D1 115/60	Ambient +20°C to +200°C standard controller	13-873-320	276003200000
EX-10 D+ 115/60	Ambient +20°C to +200°C enhanced controller	13-873-322	276003200100
EX-17 D1 115/60 BST	Ambient +12°C to +200°C standard controller	13-873-324	277003200000
EX-17 D+ 115/60 BST	Ambient +12°C to +200°C enhanced controller	13-873-326	277003200100
EX-35 D1 115/60 BST	Ambient +12°C to +200°C standard controller	13-873-328	279003200000
EX-35 D+ 115/60 BST	Ambient +12°C to +200°C enhanced controller	13-873-330	279003200100
<b>EX High Temperature</b>			
EX-250 F D3 115/60	Ambient +12°C to +200°C enhanced controller	13-265-125	109003191600
EX-251 F D3 115/60	Ambient +12°C to +200°C enhanced controller	13-265-127	116003191600
<b>ULT</b>			
ULT-95 D3 H 230/60 -95°C to -30°C	Recirculating low-temp no reservoir	13-265-91	179104241600
ULT-80 D3 Z 230/60 -80°C to +10°C	Recirculating low-temp w/reservoir	13-265-171	180104241600
ULT-80 D3 Z 230/60 -80°C to +80°C	Recirculating extended temp w/reservoir	13-265-133	180104241601
<b>CC</b>			
CC-100 F 115/60 NCFC	-90°C to -30°C semi-flex probe; 5-in. coil radius	13-265-79	229103210600
CC-100 R 115/60 NCFC	-90°C to -30°C rigid probe	13-265-75	229103220600
CC-100 A FV 115/60 NCFC	-90°C to -30°C full-flex probe; 2- to 3-in coil radius	13-265-77	229103230600
<b>CB</b>			
CB-80 MAG STIR 115/60 NCFC	-80°C to -25°C	13-265-83	253103000602
<b>Bath Accessories</b>			
EX/RTE Plumbing Package	Tygon, 3/8-in, -20°C to +100°C, 25 ft hose & insulation, fittings	13-265-136	126000000007
EX/RTE Plumbing Package	Silicone, 3/8-in, -100°C to +100°C, 25 ft hose & insulation, fittings	13-265-153	126000000012
Remote sensor	15 ft RTE-111M	NC9652731	126000000025
Tubing insulation	3/8 ID X 25 ft	13-265-149	126000000034
Leveling device assembly	ALL Z	13-265-137	126000000060
Cryotrol TC50 115/60	Accessory for CB and CC Products	13-265-85	431003001401
RPC 100-115/50/60/1	Accessory for ramping and programming for RTE & EX	13-265-196	604012000401
<b>Merlin Accessories</b>			
External temperature readout	1/2-in	13-265-161	341000000000
Plumbing package	Merlin, 1/2-in x 25 ft	13-265-47	611000000012
<b>Neslab Universal Accessories</b>			
Silicone oil	5 gallon	13-265-154	610000000000
Ethylene glycol	5 gallon, H3F1R0	13-265-155	610000000001
Chloramine-T	250 GM, H3F1R2	13-265-156	610000000003

Please visit [www.fishersci.com](http://www.fishersci.com) or [www.thermo.com/tc](http://www.thermo.com/tc) for complete descriptions and specifications.

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