

# NEW! Thermo Scientific™ Forma™ 89000 Series Ultra-Low Freezers

Dependable  $-80^{\circ}\text{C}$  storage with energy-savings and sustainability features

- **Low peak variation** helps ensure sample protection throughout entire cabinet
- **Fast door opening recovery** in as little as 13 minutes
- **$0.93^{\circ}\text{C}$  steady-state temperature** variation over time
- **Long warm-up time** from  $-80^{\circ}\text{C}$  to  $-50^{\circ}\text{C}$  in 5 hours
- **Four capacities:** 300, 400, 500 and 600 2-inch (5cm) box



## Designed to keep your samples safe

- Worry-free storage. With low peak variation, samples are protected throughout the entire cabinet.<sup>1</sup>
- Records temperature and events

## Limit environmental impact and lower HVAC costs

- Uses as low as 9.4 kWh/day, depending on size
- Less heat emission lowers HVAC costs
- Natural refrigerants compliant with EU F-Gas regulation: R170 and R290
- Environmentally-friendly, water-blown foam insulation
- Manufactured in an award-winning, zero-waste to landfill facility








## User-friendly and quiet

- Completely new freezer and user interface.
- Quiet enough to reside directly in the laboratory. At just 50 dBA, the sound is comparable to a home refrigerator.<sup>2</sup>

1. Typical freezer data based on internal testing with freezer setpoint at  $-80^{\circ}\text{C}$  and ambient temperature at  $20^{\circ}\text{C}$ . Performance data varies across freezer size and electrical specifications.

2. All data based on internal data unless otherwise noted. Data on file.

## User friendly touch-screen interface and cabinet

-  **Easy-to-use** set-up wizard, event log, temperature mapping and data downloads
-  **Capacitive touch** even when using latex gloves
-  **Touch-screen datalogging and temperature mapping** eliminates the need for a separate chart recorder
-  **Built-in USB port** for exporting data
-  **Advanced security features:** alarm settings, password-protected controller, padlock-compatible doors and optional access card entry
-  **Ergonomic design:** comfortable door handle, eye-level touch-screen and shelf-level placement that do not require floor-level loading of racks
-  **Four inner doors** minimize ambient temperature during sample retrieval



## Specifications & Ordering Information

| Upright Freezers (-50°C to -86°C) |          |                  |                 |                       |                      |                                  |                                   |                    |
|-----------------------------------|----------|------------------|-----------------|-----------------------|----------------------|----------------------------------|-----------------------------------|--------------------|
| Model Number                      | Capacity |                  | Electrical      | Amps / Breaker (Plug) | Max. Shelf Weight kg | Interior Dimensions H x W x D cm | Exterior Dimensions H x W* x D cm | Shipping Weight kg |
|                                   | liters   | 5cm (2") cryobox |                 |                       |                      |                                  |                                   |                    |
| 8930086V                          | 422      | 300              | 230V / 50Hz     | 5.9/15 (European)     | 57                   | 130.1 x 45.2 x 71.9              | 198.1 x 58.4 x 95.5               | 323                |
| 8930086D                          |          |                  | 208-230V / 60Hz | 5.6/15 (NEMA 6-15)    |                      |                                  |                                   |                    |
| 8940086V                          | 549      | 400              | 230V / 50Hz     | 5.3/15 (European)     | 75                   | 130.1 x 58.8 x 71.9              | 198.1 x 71.9 x 95.5               | 312                |
| 8940086D                          |          |                  | 208-230V / 60Hz | 5.9/15 (NEMA 6-15)    |                      |                                  |                                   |                    |
| 8950086V                          | 682      | 500              | 230V / 50Hz     | 5.9/15 (European)     | 93                   | 130.1 x 73.0 x 71.9              | 198.1 x 86.4 x 95.5**             | 333                |
| 8950086D                          |          |                  | 208-230V / 60Hz | 5.0/15 (NEMA 6-15)    |                      |                                  |                                   |                    |
| 8960086V                          | 816      | 600              | 230V / 50Hz     | 6.1/15 (European)     | 111                  | 130.1 x 87.3 x 71.9              | 198.1 x 100.6 x 95.5**            | 372                |
| 8960086D                          |          |                  | 208-230V / 60Hz | 6.2/15 (NEMA 6-15)    |                      |                                  |                                   |                    |

\* Allowance for handle and hinge, add 10.7 cm to cabinet width  
 \*\* Doorway width clearance is 87.6 cm for 8950086 and 8960086



| Performance Data |   |   |                                 |  |                   |
|------------------|---|---|---------------------------------|--|-------------------|
| Model Number     | Energy Consumption (kW-hr/day)* Standard Mode | Peak Variation from -80°C setpoint (°C)** | Door Opening Recovery (minutes) | Warm Up Time (-80°C to -50°C) (minutes)*** | Noise Level (dBA) |
| 8930086          | 9.4   | +8.5 / -2.4                               | 13                              | 254  | 52                |
| 8940086          | 9.8   | +8.7 / -1.2                               | 15                              | 262  | 52                |
| 8950086          | 10.8  | +6.6 / -1.0                               | 21                              | 258  | 50                |
| 8960086          | 11.5  | +6.5 / -0.8                               | 26                              | 300  | 50                |

\* Energy Calculation: Typical freezer data based on internal testing with freezer setpoint at -80°C and ambient temperature at 20°C  
 \*\* Peak Variation From Setpoint: Typical freezer data based on internal testing with freezer setpoint at -80°C and ambient temperature at 20°C  
 \*\*\* Warm Up Time: Typical freezer data based on internal testing with freezer setpoint at -80°C and ambient temperature at 20°C

Find out more at [thermofisher.com/cold](http://thermofisher.com/cold)

# Thermo Scientific™ Forma™ 89000 Series Ultra-Low Freezers

## Options and Accessories (Field Installed must be installed by a qualified professional)

| Options  | Installation      | 8930086               | 8940086     | 8950086     | 8960086     |
|--|-------------------|-----------------------|-------------|-------------|-------------|
| <b>LN2 Backup System</b><br>Maintains temperature down to -80°C with liquid nitrogen. Models for 89300 are stand alone.  | Factory Installed | N/A                   | LN4567      | LN4567      | LN4567      |
|  | Field Installed   | FLN300V*<br>FLN300W** | FLN4567LE   | FLN4567LE   | FLN4567LE   |
| <b>CO2 Backup System</b><br>Maintains temperature down to -67°C with CO2. Models for 89300 are stand alone.  | Factory Installed | N/A                   | CO4567      | CO4567      | CO4567      |
|  | Field Installed   | FCO300V*<br>FCO300W** | FCO4567LE   | FCO4567LE   | FCO4567LE   |
| <b>Chart Recorder (Inkless)</b><br>6" (15.2 cm), seven day inkless recorder, -115° to +50°C, +5°C resolution   | Factory Installed | N/A                   | CR4567      | CR4567      | CR4567      |
|  | Field Installed   | N/A                   | FCR400LE    | FCR500LE    | FCR600LE    |
| <b>Chart Recorder (Ink)</b><br>6" (15.2 cm), seven day inkless recorder, -115° to +50°C, +5°C resolution   | Factory Installed | N/A                   | CRP4567     | CRP4567     | CRP4567     |
|  | Field Installed   | 6383-6V*<br>6383-6W** | FCRP400LE   | FCRP500LE   | FCRP600LE   |
| <b>Access Key Option Card</b><br>Access control. Includes five key cards. Supports ISO15693 and ISO14443 protocols.  | Factory Installed | RAC34567              | RAC34567    | RAC34567    | RAC34567    |
|  | Field Installed   | FAC34567LE            | FAC34567LE  | FAC34567LE  | FAC34567LE  |
| <b>Stainless Steel Freezer Interior</b>  | Factory Installed | SS34567               | SS34567     | SS34567     | SS34567     |
| <b>Twist Lock Plug</b><br>NEMA L6-15P for 208-230V / 60Hz  | Factory Installed | US230V15ATL           | US230V15ATL | US230V15ATL | US230V15ATL |
|  | Field Installed   | TL230V15A             | TL230V15A   | TL230V15A   | TL230V15A   |
| <b>Twist Lock Plug</b><br>NEMA L6-20P for 208-230V / 60Hz  | Factory Installed | US230V20ATL           | US230V20ATL | US230V20ATL | US230V20ATL |
|  | Field Installed   | TL230V20A             | TL230V20A   | TL230V20A   | TL230V20A   |
| Accessories  |                   | 8930086               | 8940086     | 8950086     | 8960086     |
| <b>Access Key Pack:</b> Includes five key cards.   |                   | ACE34567              | ACE34567    | ACE34567    | ACE34567    |
| <b>Shelf Kit:</b> Includes one shelf and shelf support clips   |                   | SK300                 | SK400       | SK500       | SK600       |
| <b>Chart Paper Ink (Pack of 50)</b>  |                   | 17020                 | 17020       | 17020       | 17020       |
| <b>Chart Paper Inkless (Pack of 50)</b>  |                   | N/A                   | 6185        | 6185        | 6185        |
| <b>Replacement Air Filter</b>  |                   | AF34567LE             | AF34567LE   | AF34567LE   | AF34567LE   |
| <b>Replacement Back-Up Battery</b>   |                   | 400159                | 400159      | 400159      | 400159      |
| <b>Alarm Delay Module:</b> Eliminates nuisance alarms due to intermittent or transitory conditions. Adjustable delay requires alarm condition to exist for user defined period before signal is released to monitoring system. |                   | 6903                  | 6903        | 6903        | 6903        |
| <b>Cryo Gloves Medium</b>  |                   | 4425                  | 4425        | 4425        | 4425        |
| <b>Cryo Gloves Large</b>   |                   | 4426                  | 4426        | 4426        | 4426        |
| <b>Seismic Restraint Kit</b>   |                   | TF-ULT300             | TF-ULT400   | TF-ULT500   | TF-ULT600   |

\*V = 230V/50Hz (European plug)

\*\*W = 230V/50Hz (UK plug)

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## Thermo Scientific™ Forma™ 89000 Series Ultra-Low Freezers

### Racks for Boxes and Microplates

| Racks for 2" (5.08 cm) Boxes |                             |                            |                   |       |       |       |       |
|------------------------------|-----------------------------|----------------------------|-------------------|-------|-------|-------|-------|
| Model No.                    | Description                 | Dimensions<br>H x W x D cm | Storage           | 89300 | 89400 | 89500 | 89600 |
| 920090                       | Sliding Drawer Rack         | 30.2 x 14 x 68.3           | Boxes Per Rack    | 25    | 25    | 25    | 25    |
|                              |                             |                            | Racks Per Shelf   | 3     | 4     | 5     | 6     |
|                              |                             |                            | Racks Per Freezer | 12    | 16    | 20    | 24    |
|                              |                             |                            | Boxes Per Freezer | 300   | 400   | 500   | 600   |
| 1950520                      | Adjustable Side Access Rack | 29.5 x 13.7 x 67.9         | Boxes Per Rack    | 25    | 25    | 25    | 25    |
|                              |                             |                            | Racks Per Shelf   | 3     | 4     | 5     | 6     |
|                              |                             |                            | Racks Per Freezer | 12    | 16    | 20    | 24    |
|                              |                             |                            | Boxes Per Freezer | 300   | 400   | 500   | 600   |

| Racks for 3" (7.62 cm) Boxes |                     |                            |                   |       |       |       |       |
|------------------------------|---------------------|----------------------------|-------------------|-------|-------|-------|-------|
| Model No.                    | Description         | Dimensions<br>H x W x D cm | Storage           | 89300 | 89400 | 89500 | 89600 |
| 920091                       | Sliding Drawer Rack | 30.2 x 14 x 68.3           | Boxes Per Rack    | 15    | 15    | 15    | 15    |
|                              |                     |                            | Racks Per Shelf   | 3     | 4     | 5     | 6     |
|                              |                     |                            | Racks Per Freezer | 12    | 16    | 20    | 24    |
|                              |                     |                            | Boxes Per Freezer | 180   | 240   | 300   | 360   |

| Racking Shelf Kits  |                |           |           |           |           |
|---|----------------|-----------|-----------|-----------|-----------|
| Description   | Storage        | 89300     | 89400     | 89500     | 89600     |
| Sliding Drawer Racks and 2" Boxes with 100 Count Cell Dividers (fits one shelf) | Model No.      | RSK300SD4 | RSK400SD4 | RSK500SD4 | RSK600SD4 |
|   | Racks Included | 3         | 4         | 5         | 6         |
|   | Boxes Included | 75        | 100       | 125       | 150       |

| Racks for Microplates |  |                            |                    |       |       |       |       |
|-----------------------|--|----------------------------|--------------------|-------|-------|-------|-------|
| Model No.             | Description  | Dimensions<br>H x W x D cm | Storage            | 89300 | 89400 | 89500 | 89600 |
| 1950592               | Side Access Rack with Locking Rod for Standard or Deepwell | 30.2 x 14 x 65.3           | Plates Per Rack    | 147   | 147   | 147   | 147   |
|                       |  |                            | Racks Per Shelf    | 3     | 4     | 5     | 6     |
|                       |  |                            | Racks Per Freezer  | 12    | 16    | 20    | 24    |
|                       |  |                            | Plates Per Freezer | 1764  | 2352  | 2940  | 3528  |

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## Thermo Scientific™ Forma™ 89000 Series Ultra-Low Freezers

### Boxes and Dividers

| Model No. | Description   | # of Dividers | Quantity | Color    |
|-----------|---|---------------|----------|----------|
| 5026-0909 | Thermo Scientific™ Nalgene™ polycarbonate 2" (5.08 cm) box for 1.2-2.0 mL vials | 81            | 24       | white    |
| 5954      | 2" (5.08 cm) fiberboard box   | 0             | 12       | white    |
| 820002    | 2" (5.08 cm) fiberboard box   | 81            | 1        | white    |
| 820109    | 2" (5.08 cm) fiberboard box   | 100           | 1        | white    |
| 5956      | 3" (7.62 cm) fiberboard box   | 0             | 12       | white    |
| 820003    | 3" (7.62 cm) fiberboard box   | 81            | 1        | white    |
| 1950878   | 2" (5.08 cm) fiberboard box   | 0             | 12       | multiple |
| 1950879   | 2" (5.08 cm) fiberboard box   | 0             | 12       | pink     |
| 1950880   | 2" (5.08 cm) fiberboard box   | 0             | 12       | red      |
| 1950881   | 2" (5.08 cm) fiberboard box   | 0             | 12       | yellow   |
| 1950882   | 2" (5.08 cm) fiberboard box   | 0             | 12       | green    |
| 1950883   | 2" (5.08 cm) fiberboard box   | 0             | 12       | blue     |
| 1950884   | 2" (5.08 cm) fiberboard box   | 0             | 12       | black    |

### Fiberboard Dividers

| Model No. | Description                      | Quantity/Case |
|-----------|----------------------------------|---------------|
| 5958      | Grid dividers for 100 12mm vials | 12            |
| 6212      | Grid dividers for 81 13mm vials  | 12            |
| 5960      | Grid dividers for 64 14mm vials  | 12            |
| 5959      | Grid dividers for 49 16mm vials  | 12            |

### Vials and Tubes

| Model No. | Description   | Quantity/Case |
|-----------|---|---------------|
| 377267    | Thermo Scientific™ Nunc™ 1.8mL screw-top round-bottom vials with internal threading | 1,800         |

Visit [thermofisher.com](http://thermofisher.com) for additional vials, tubes and sample storage consumables

Thermo Scientific™ Forma™ 89000 Series Ultra-Low Freezers

Sliding Drawer Racks for Matrix and Cryobank Tubes

|   |   | Freezer Model                           | 89300               | 89400               | 89500               | 89600               |
|---|---|---|---------------------|---------------------|---------------------|---------------------|
| <b>200 µL Capacity Tubes</b>                              |   |   |                     |                     |                     |                     |
| 3747,<br>3748,<br>4988                                    | Thermo Scientific™<br>Matrix™ 200 µL 2D<br>Internally-threaded<br>Universal Tubes<br>Box Dimension:<br>8.5 x 12.8 x 2.75 cm                             | <b>Rack Model No</b>                    | <b>1950787</b>      | <b>1950787</b>      | <b>1950787</b>      | <b>1950787</b>      |
|   |   | Freezer Rack<br>Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
|   |   | Tubes per Box                           | 96                  | 96                  | 96                  | 96                  |
|   |   | Boxes Per Rack                          | 56                  | 56                  | 56                  | 56                  |
|   |   | Racks Per Shelf                         | 3                   | 4                   | 5                   | 6                   |
|   |   | Racks Per Freezer                       | 12                  | 16                  | 20                  | 24                  |
|   |   | Tubes Per Freezer                       | 64,512              | 86,016              | 107,520             | 129,024             |
| <b>500 µL Capacity Tubes</b>                              |   |   |                     |                     |                     |                     |
| 3734,<br>3735,<br>4898                                    | Thermo Scientific<br>Matrix 500 µL 2D<br>Open Top Tubes<br>Box Dimension:<br>8.5 x 12.8 x 2.6 cm  | <b>Rack Model No</b>                    | <b>1950787</b>      | <b>1950787</b>      | <b>1950787</b>      | <b>1950787</b>      |
|   |   | Freezer Rack<br>Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
| 3736,<br>3737,<br>4899                                    | Thermo Scientific™<br>Matrix™ 200 µL 2D with<br>Duraseals Installed<br>Internally-threaded<br>Universal Tubes<br>Box Dimension:<br>8.5 x 12.8 x 2.75 cm | Tubes per Box                           | 96                  | 96                  | 96                  | 96                  |
|   |   | Boxes Per Rack                          | 56                  | 56                  | 56                  | 56                  |
|   |   | Racks Per Shelf                         | 3                   | 4                   | 5                   | 6                   |
|   |   | Racks Per Freezer                       | 12                  | 16                  | 20                  | 24                  |
|   |   | Tubes Per Freezer                       | 64,512              | 86,016              | 107,520             | 129,024             |
| 374086,<br>374087<br>(including<br>color<br>options)      | Thermo Scientific<br>Nunc™ Cryobank™<br>500 µl Internally<br>Threaded Tubes<br>Box Dimension:<br>8.5 x 12.8 x 3.5 cm                                    | <b>Rack Model No</b>                    | <b>1950791</b>      | <b>1950791</b>      | <b>1950791</b>      | <b>1950791</b>      |
|   |   | Freezer Rack<br>Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
| 3743,<br>3744,<br>3745<br>(including<br>color<br>options) | Thermo Scientific<br>Matrix 500 µL 2D<br>Internally Threaded<br>ScrewTop Tubes<br>Box Dimension:<br>8.5 x 12.8 x 4.4 cm                                 | Tubes per Box                           | 96                  | 96                  | 96                  | 96                  |
|   |   | Boxes Per Rack                          | 42                  | 42                  | 42                  | 42                  |
|   |   | Racks Per Shelf                         | 3                   | 4                   | 5                   | 6                   |
|   |   | Racks Per Freezer                       | 12                  | 16                  | 20                  | 24                  |
|   |   | Tubes Per Freezer                       | 48,384              | 64,512              | 80,640              | 96,768              |

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# Thermo Scientific™ Forma™ 89000 Series Ultra-Low Freezers

## Sliding Drawer Racks for Matrix and Cryobank Tubes

|   |  | Freezer Model                           | 89300               | 89400               | 89500               | 89600               |
|---|--|---|---------------------|---------------------|---------------------|---------------------|
| <b>750 µL Capacity Tubes</b>                              |  |   |                     |                     |                     |                     |
| 3731,<br>3732,<br>4896                                    | Thermo Scientific<br>Matrix 750 µL 2D<br>Open Top Tubes<br>Box Dimension:<br>8.5 x 12.8 x 3.9 cm                       | <b>Rack Model No</b>                    | <b>1950791</b>      | <b>1950791</b>      | <b>1950791</b>      | <b>1950791</b>      |
|   |  | Freezer Rack<br>Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
| 3729,<br>4896   | Thermo Scientific<br>Matrix 750 µL 2D Tubes<br>with Duraseals Installed<br>Box Dimension:<br>8.5 x 12.8 x 3.9 cm       | Tubes per Box                           | 96                  | 96                  | 96                  | 96                  |
|   |  | Boxes Per Rack                          | 42                  | 42                  | 42                  | 42                  |
|   |  | Racks Per Shelf                         | 3                   | 4                   | 5                   | 6                   |
|   |  | Racks Per Freezer                       | 12                  | 16                  | 20                  | 24                  |
|   |  | Tubes Per Freezer                       | 48,384              | 64,512              | 80,640              | 96,768              |
| <b>1.0 mL Capacity Tubes</b>                              |  |   |                     |                     |                     |                     |
| 374088,<br>374089<br>(including<br>color<br>options)      | Thermo Scientific<br>Nunc Cryobank 1.0 mL<br>Internally Threaded<br>Tubes<br>Box Dimension:<br>8.5 x 12.8 x 4.9 cm     | <b>Rack Model No</b>                    | <b>1950642</b>      | <b>1950642</b>      | <b>1950642</b>      | <b>1950642</b>      |
|   |  | Freezer Rack<br>Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
|   |  | Tubes per Box                           | 96                  | 96                  | 96                  | 96                  |
|   |  | Boxes Per Rack                          | 35                  | 35                  | 35                  | 35                  |
|   |  | Racks Per Shelf                         | 3                   | 4                   | 5                   | 6                   |
|   |  | Racks Per Freezer                       | 12                  | 16                  | 20                  | 24                  |
| Tubes Per Freezer   | 40,320   | 53,760                                  | 67,200              | 80,640              |                     |                     |
| 3740,<br>3741,<br>3742<br>(including<br>color<br>options) | Thermo Scientific<br>Matrix 1.0mL 2D<br>Internally Threaded<br>ScrewTop Tubes<br>Box Dimension:<br>8.5 x 12.8 x 5.8 cm | <b>Rack Model No</b>                    | <b>1950799</b>      | <b>1950799</b>      | <b>1950799</b>      | <b>1950799</b>      |
|   |  | Freezer Rack<br>Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
|   |  | Tubes per Box                           | 96                  | 96                  | 96                  | 96                  |
|   |  | Boxes Per Rack                          | 28                  | 28                  | 28                  | 28                  |
|   |  | Racks Per Shelf                         | 3                   | 4                   | 5                   | 6                   |
|   |  | Racks Per Freezer                       | 12                  | 16                  | 20                  | 24                  |
| Tubes Per Freezer   | 32,256   | 43,008                                  | 53,760              | 64,512              |                     |                     |

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# Thermo Scientific™ Forma™ 89000 Series Ultra-Low Freezers

## Sliding Drawer Racks for Matrix and Cryobank Tubes

|                                     |  | Freezer Model                        | 89300               | 89400               | 89500               | 89600               |
|-------------------------------------|--|--------------------------------------|---------------------|---------------------|---------------------|---------------------|
| <b>1.4 mL Capacity Tubes</b>        |  |                                      |                     |                     |                     |                     |
| 3791,<br>3792,<br>4890              | Thermo Scientific Matrix 1.4ml 2D Open Top Tubes<br>Box Dimension: 8.5 x 12.8 x 4.9 cm                       | <b>Rack Model No</b>                 | <b>1950642</b>      | <b>1950642</b>      | <b>1950642</b>      | <b>1950642</b>      |
|                                     |  | Freezer Rack Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
| 3801,<br>4890                       | Thermo Scientific Matrix 1.4mL 2D Tubes with Duraseals Installed<br>Box Dimension: 8.5 x 12.8 x 4.9 cm       | Tubes per Box                        | 96                  | 96                  | 96                  | 96                  |
|                                     |  | Boxes Per Rack                       | 35                  | 35                  | 35                  | 35                  |
| 3711,<br>3112,<br>4890              | Thermo Scientific Matrix 1.4ml Human Readable Open Top Tubes Installed<br>Box Dimension: 8.5 x 12.8 x 4.9 cm | Racks Per Shelf                      | 3                   | 4                   | 5                   | 6                   |
|                                     |  | Racks Per Freezer                    | 12                  | 16                  | 20                  | 24                  |
|                                     |  | Tubes Per Freezer                    | 40,320              | 53,760              | 67,200              | 80,640              |
| <b>1.8 to 2.0 mL Capacity Tubes</b> |  |                                      |                     |                     |                     |                     |
| 374500,<br>374501                   | Thermo Scientific Nunc 1.8 mL Externally-threaded Universal Tubes<br>Box Dimension: 8.5 x 12.8 x 5.5 cm      | <b>Rack Model No</b>                 | <b>1950642</b>      | <b>1950642</b>      | <b>1950642</b>      | <b>1950642</b>      |
|                                     |  | Freezer Rack Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
| 374221,<br>374223                   | Thermo Scientific Nunc Cryobank 2.0 ml Internally Threaded Tubes<br>Box Dimension: 8.5 x 12.8 x 5.5 cm       | Tubes per Box                        | 48                  | 48                  | 48                  | 48                  |
|                                     |  | Boxes Per Rack                       | 35                  | 35                  | 35                  | 35                  |
|                                     |  | Racks Per Shelf                      | 3                   | 4                   | 5                   | 6                   |
|                                     |  | Racks Per Freezer                    | 12                  | 16                  | 20                  | 24                  |
|                                     |  | Tubes Per Freezer                    | 20,160              | 26,880              | 33,600              | 40,320              |
| <b>5.0 mL Capacity Tubes</b>        |  |                                      |                     |                     |                     |                     |
| 374220,<br>374222                   | Thermo Scientific Nunc Cryobank 5.0 ml Internally Threaded Tubes<br>Box Dimension: 8.5 x 12.8 x 9.6 cm       | <b>Rack Model No</b>                 | <b>1950819</b>      | <b>1950819</b>      | <b>1950819</b>      | <b>1950819</b>      |
|                                     |  | Freezer Rack Dimensions<br>W x H x D | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm | 14 x 30.3 x 68.5 cm |
|                                     |  | Tubes per Box                        | 48                  | 48                  | 48                  | 48                  |
|                                     |  | Boxes Per Rack                       | 21                  | 21                  | 21                  | 21                  |
|                                     |  | Racks Per Shelf                      | 3                   | 4                   | 5                   | 6                   |
|                                     |  | Racks Per Freezer                    | 12                  | 16                  | 20                  | 24                  |
|                                     |  | Tubes Per Freezer                    | 12,096              | 16,128              | 20,160              | 24,192              |

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