Thermo Scientific Matrix
Barcoded Tubes and Racks

Identify and track your samples
for optimal sample storage

**Thermo Scientific™ Matrix™
2D Barcoded ScrewTop Tubes in
Barcoded Racks**

Matrix 2D Barcoded ScrewTop Storage
tubes are now available in a standard
barcoded latch rack. The barcoded latch
rack provides permanent 2D, linear,
and human readable codes on 3 sides
of the rack. A 2D barcode on the rack
bottom enables orientation detection
and identification when using automated
storage equipment. These additions to the
Matrix ScrewTop Storage tube portfolio
allow visual sample identification in
a range of laboratory procedures and
eliminate the need for secondary labeling.

Eliminate Secondary Labeling Steps.
Matrix 2D Barcoded ScrewTop Storage tubes
are available pre-printed with 1D and human-
readable codes that match the tube's 2D code.
Laser etched 2D, linear and human readable
barcodes are also included on the sides of the
standard latch racks. The additional barcoding
on tube and rack eliminates the need for the
secondary application of labels, streamlining
storage procedures.

Enhanced Secure Tracking. A permanently
bonded, unique 2D barcode is laser etched onto
the base of every tube to securely identify and
track samples. The linear and human readable
codes match this unique 2D barcode, allowing
1D scanning or visual identification of samples
across satellite or collaborative sites without
2D readers. Complementary Thermo Scientific
2D and 1D barcode readers scan and instantly
decode each tube's barcode into any application
or database. Laser etched 2D, linear, and human
readable barcodes are included on three sides
of the standard latch rack, providing traceability
at the rack level and providing readability to
laboratories with or without barcode decoding
equipment. The 2D barcode included on the
bottom of the rack serves as both an orientation
and identification feature for automated and
benchtop storage equipment.

Superior Storage Format. Matrix 2D
Barcoded ScrewTop storage tubes are available
in specially designed, barcoded, stackable,
microplate-footprint Latch Racks to save
precious space in storage and on the bench
top while maintaining traceability. Lid can
be positioned to rest on the rack, preventing
contamination during manual pipetting. Or
remove lid completely for robotic handling.

Flexibility. Side-printed Matrix ScrewTop tubes
and barcoded latch racks maintain compatibility
with existing ScrewTop tube storage systems
and accessories. ScrewTop Removal Tool caps/
decaps tubes individually to enable one-handed
pipetting. The Thermo Scientific ScrewTop Cap
Tray can be used to cap/decap several tubes at
once with automated capping systems or to fill
tubes on an automated liquid handling platform,
then cap an entire rack at once. Seven color cap
options allow easy identification of samples at
a glance.

Stringent Quality Control. Every 2D barcoded
storage tube is scanned to ensure readability. All
barcodes are checked against our database of
previously assigned codes to prevent duplicates.
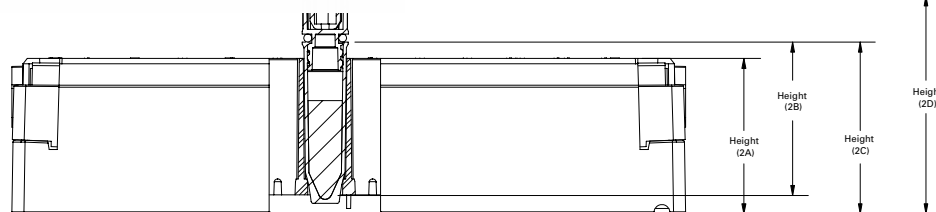
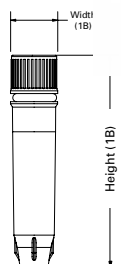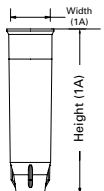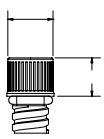**Thermo**
SCIENTIFIC

Tube Material	Virgin Class VI Medical Grade Polypropylene
Rack Material	Polycarbonate with acetal latches
Cap Material	Virgin Class VI Medical Grade Polypropylene with Santoprene™ gasket
ScrewTop Cap Tray Material	Acrylonitrile Butadiene Styrene (ABS)
Contaminant-free	All tubes and tray are supplied free from DNA, RNAse, DNAse and endotoxins
Autoclavable	Racked and unracked tubes are autoclavable with the caps loosened; ScrewTop trays are not autoclavable
2D Code	Non-proprietary, 12x12 Data-matrix with ECC200 Built-in Error Correction
Tube/Cap Temp Range	-196°C to 121°C; Autoclaving and boiling to vapor phase liquid nitrogen storage
Latch Rack Coding	2D Datamatrix; Linear EAN Code 128; Human Readable

Description	500 µl ScrewTop Storage Tubes		1.0 ml ScrewTop Storage Tubes
Item Number	3743, 3744, 3745 3744-WP; 3744-WP1D; 3745-WP; 3745-WP1D		3740, 3741, 3742 3741-WP; 3741-WP1D; 3742-WP; 3742-WP1D
Figure 1A: Tube Side View	Width (1A)	7.40±0.10 [0.290±0.002]	7.40±0.10 [0.290±0.002]
	Height (1A)	30.60±0.20 [1.204±0.007]	44.00±0.10 [1.732±0.003]
Figure 1B: Tube Side View w/ ScrewTop	Width (1B)	8.70±0.10 [0.344±0.003]	8.70±0.10 [0.344±0.003]
	Height (1B)	39.20 [1.543]	52.60 [2.071]
Figure 2: Rack Side View	Height (2A)	29.50±0.10 [1.160±0.005]	38.10±0.10 [1.500±0.005]
	Height (2B)	29.10±0.10 [1.145±0.005]	42.50±0.20 [1.673±0.008]
	Height (2C)	32.60±0.30 [1.282±0.012]	46.00±0.20 [1.809±0.008]
	Height (2D)	41.30±0.40 [1.626±0.017]	54.60±0.30 [2.149±0.110]
Figure 3: Rack Top View	Length	127.75±0.13 [5.029±0.005]	127.75±0.13 [5.029±0.005]
	Width	85.46±0.13 [3.364±0.005]	85.46±0.13 [3.364±0.005]
Figure 4: Stacked Rack View	Single Height (4A)	44.32±0.24 [1.745±0.010]	58.42±0.25 [2.300±0.010]
	Incremental Height (4B)	43.31±0.25 [1.705±0.010]	57.30±0.25 [2.220±0.010]
	Stacked Height (4C)	87.63±0.51 [3.450±0.020]	114.81±0.51 [4.520±0.020]

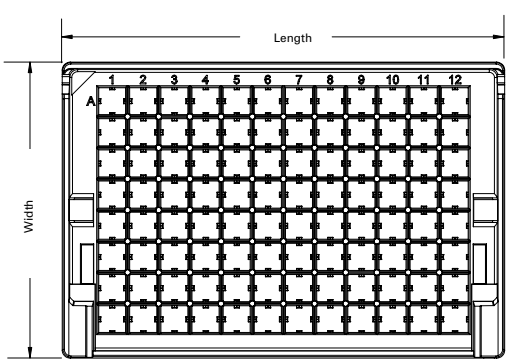| Description	Storage Tubes Barcoded Rack	
Item Number	3743-BR, 3744-BR, 3745-BR, 3744-WP-BR, 3744-WP1D-BR, 3745-WP-BR, 3745-WP1D-BR, 3740-BR, 3741-BR, 3742-BR, 3741-WP-BR, 3741-WP1D-BR, 3742-WP-BR, 3742-WP1D-BR, 3748-BR	
Figure 5: Rack Bottom View		
	Distance to barcode from short side (5A)	120.48 ± 0.254 [4.74 ± 0.010]
	Distance to barcode from short side (5B)	1.443 ± 0.203 [0.057 ± 0.008]
	Barcode length	5.83 ± 0.127 [0.230 ± 0.005]
	Distance to barcode from long side (5C)	71.98 ± 0.254 [2.834 ± 0.010]
	Distance to barcode from long side (5D)	8.18 ± 0.203 [0.322 ± 0.008]
	Barcode width	5.30 ± 0.127 [0.209 ± 0.005]

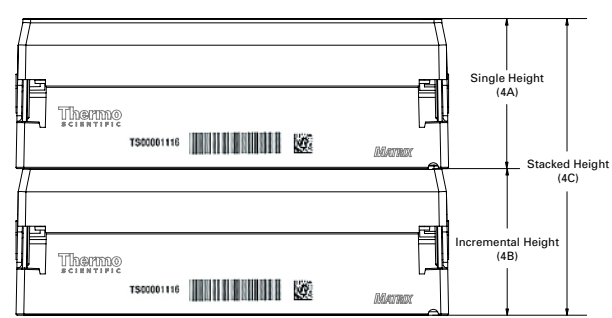| Description	ScrewTop Cap Tray	
Item Number	4906, 4477	
Figure 6: Tray Top View	Length	127.75±0.25 [5.03±0.010]
	Width	85.58±0.25 [3.37±0.010]
Figure 7: Stacked Tray View	Single Height (2A)	19.81±0.13 [0.78±0.005]
	Incremental Height (2B)	18.29±0.25 [0.72±0.010]
	Stacked Height (2C)	38.10±0.25 [1.50±0.010]

Matrix Barcoded ScrewTop Tubes
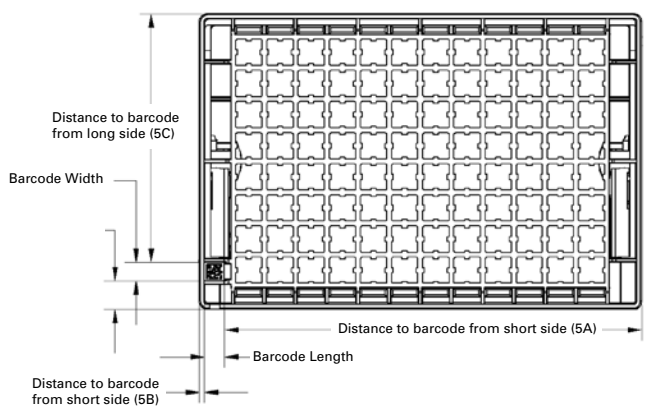
▲ Figure1: Tube Side View
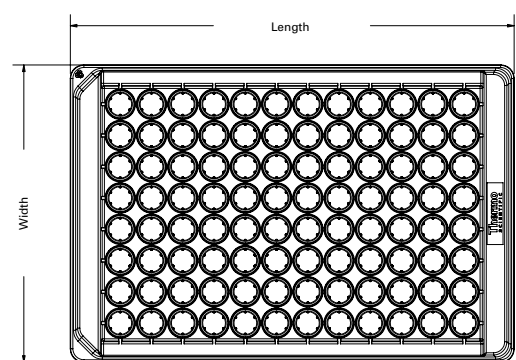
▲ Figure 2: Rack Side View
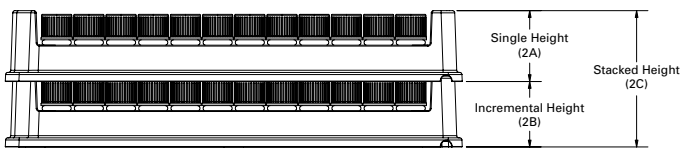

▲ Figure 3: Rack Top View

▲ Figure 4: Stacked Rack View

▲ Figure 5: Rack Bottom View

▲ Figure 6: Tray Top View

▲ Figure 7: Stacked Tray View

Cat. No. Non-Barcoded Rack	Cat. No. Barcoded Rack	Description	Max Working Volume, µL	Cap Color	Qty	
3744	3744-BR	Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Colorless	5 racks of 96/case	Sterile
3744RED	3744RED-BR	Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Red	5 racks of 96/case	Sterile
3744YEL	3744YEL-BR	Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Yellow	5 racks of 96/case	Sterile
3744BLU	3744BLU-BR	Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Blue	5 racks of 96/case	Sterile
3744GRE	3744GRE-BR	Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Green	5 racks of 96/case	Sterile
3744WHI	3744WHI-BR	Tube, ScrewTop, 500 µL 2D, V-Bottom	590	White	5 racks of 96/case	Sterile
3744PUR	3744PUR-BR	Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Purple	5 racks of 96/case	Sterile
3744AMB	3744AMB-BR	Amber Tube, ScrewTop, 500µL 2D, V-bottom	590		5 racks of 96/case	Sterile
3743AMB	3743AMB-BR	Amber Tube, ScrewTop, 500µL 2D, V-bottom	590	Red	5 racks of 96/case	Sterile
3745	3745-BR	Tube, ScrewTop, 500 µL 2D, V-Bottom, No Caps	590		5 racks of 96/case	Sterile
3744-WP	3744-WP-BR	Tube, ScrewTop, 500 µL 2D, WP, V-Bottom	590	Colorless	5 racks of 96/case	Sterile
3744-WP1D	3744-WP1D-BR	Tube, ScrewTop, 500 µL 2D, WP/1D, V-Bottom	590	Colorless	5 racks of 96/case	Sterile
3745-WP	3745-WP-BR	Tube, ScrewTop, 500 µL 2D, WP, V-Bottom, No caps	590		5 racks of 96/case	Sterile
3745-WP1D	3745-WP1D-BR	Tube, ScrewTop, 500 µL 2D, WP/1D, V-Bottom, No caps	590		5 racks of 96/case	Sterile
3743		Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Colorless	Bulk, 480/case	Sterile
3743RED		Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Red	Bulk, 480/case	Sterile
3743YEL		Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Yellow	Bulk, 480/case	Sterile
3743BLU		Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Blue	Bulk, 480/case	Sterile
3743GRE		Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Green	Bulk, 480/case	Sterile
3743WHI		Tube, ScrewTop, 500 µL 2D, V-Bottom	590	White	Bulk, 480/case	Sterile
3743PUR		Tube, ScrewTop, 500 µL 2D, V-Bottom	590	Purple	Bulk, 480/case	Sterile
3741	3741-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Colorless	5 racks of 96/case	Sterile
3741RED	3741RED-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Red	5 racks of 96/case	Sterile
3741YEL	3741YEL-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Yellow	5 racks of 96/case	Sterile
3741BLU	3741BLU-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Blue	5 racks of 96/case	Sterile
3741GRE	3741GRE-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Green	5 racks of 96/case	Sterile
3741WHI	3741WHI-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	White	5 racks of 96/case	Sterile
3741PUR	3741PUR-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Purple	5 racks of 96/case	Sterile
3741AMB	3741AMB-BR	Amber Tube, ScrewTop, 1.0mL 2D, V-Bottom	940	Red	5 racks of 96/case	Sterile
3742AMB	3742AMB-BR	Amber Tube, ScrewTop, 1.0mL 2D, V-Bottom	940		5 racks of 96/case	Sterile
3742	3742-BR	Tube, ScrewTop, 1.0 mL 2D, V-Bottom, No Caps	940		5 racks of 96/case	Sterile
3741-WP	3741-WP-BR	Tube, ScrewTop, 1.0 mL 2D, WP, V-Bottom	940	Colorless	5 racks of 96/case	Sterile
3741-WP1D	3741-WP1D-BR	Tube, ScrewTop, 1.0 mL 2D, WP/1D, V-Bottom	940	Colorless	5 racks of 96/case	Sterile
3742-WP	3742-WP-BR	Tube, ScrewTop, 1.0 mL 2D, WP, V-Bottom, No caps	940		5 racks of 96/case	Sterile
3742-WP1D	3742-WP1D-BR	Tube, ScrewTop, 1.0 mL 2D, WP/1D, V-Bottom, No caps	940		5 racks of 96/case	Sterile
3740		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Colorless	Bulk, 480/case	Sterile
3740RED		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Red	Bulk, 480/case	Sterile
3740YEL		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Yellow	Bulk, 480/case	Sterile
3740BLU		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Blue	Bulk, 480/case	Sterile
3740GRE		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Green	Bulk, 480/case	Sterile
3740WHI		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	White	Bulk, 480/case	Sterile
3740PUR		Tube, ScrewTop, 1.0 mL 2D, V-Bottom	940	Purple	Bulk, 480/case	Sterile

Sterile ScrewTop Tube Caps

Cat. No.	Description	Cap Color	Qty/Case	Cat. No.	Description	Cap Color	Qty/Case
4906	Tray, ScrewTop Cap, Empty		5 trays	4470	Caps, ScrewTop Tube	Colorless	Bulk, 500
4477	Tray, ScrewTop Cap	Colorless	5 trays of 96 caps	4470RED	Caps, ScrewTop Tube	Red	Bulk, 500
4477RED	Tray, ScrewTop Cap	Red	5 trays of 96 caps	4470YEL	Caps, ScrewTop Tube	Yellow	Bulk, 500
4477YEL	Tray, ScrewTop Cap	Yellow	5 trays of 96 caps	4470BLU	Caps, ScrewTop Tube	Blue	Bulk, 500
4477BLU	Tray, ScrewTop Cap	Blue	5 trays of 96 caps	4470GRE	Caps, ScrewTop Tube	Green	Bulk, 500
4477GRE	Tray, ScrewTop Cap	Green	5 trays of 96 caps	4470WHI	Caps, ScrewTop Tube	White	Bulk, 500
4477WHI	Tray, ScrewTop Cap	White	5 trays of 96 caps	4470PUR	Caps, ScrewTop Tube	Purple	Bulk, 500
4477PUR	Tray, ScrewTop Cap	Purple	5 trays of 96 caps				

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