

# Fits in. Stands out.





- to **your space**, with its compact footprint.
- ▶ to your applications, accommodating multi-laboratory settings with the flexibility to adapt with evolving clinical and research needs, in both ventilated and refrigerated options.





# Stands out.

- designed for solid reliability and consistent results.
- ▶ featuring innovative Thermo Scientific™ technologies:
- anticipating and addressing your most pressing lab needs even the ones you don't know you have yet.





# Auto-Lock™ Rotor Exchange

Secure push-button application versatility and cleaning convenience



## ClickSeal™ Biocontainment Lids

One-handed, certified<sup>1</sup> sample protection



## **Maximized Swing-Out Capacity**

Process up to 8 x 50 mL conical tubes, 24 x 5/7 mL blood tubes, microplates and microtubes, all in one versatile centrifuge



## **Fixed Angle Flexibility**

Spin 50 mL conical tubes at over 12,000 x g or a wide range of microtubes at speeds up to 30,279 x g



& Biocontainment certification by the Public

# Fits in. Stands out.



# Simple solutions. Flexible processing.

Secure, push-button **Auto-Lock** rotor exchange in as little as 3 seconds delivers:

- Trouble-free rotor installation and removal
  - 1] No tools are required
  - 2 No complicated rotor changing procedures
- Clear chamber access for cleaning convenience
- Quick switch between applications from conical tubes to blood tubes, and from microtubes to microplates – and the flexibility to evolve with the changing needs of your laboratory

#### Optimize bench space with maximized capacity:

- 8 x 50 mL swinging bucket rotor capacity or 4 microplates for research needs
- Micro-volume rotor portfolio supports 0.2, 0.25, 0.5, 1.5, 2 and 5 mL microtubes
- Clinical processing up to 24 x 5/7 mL blood tubes per run



# Reliable quality. **Safe operation.**

- Biocontainment sealing options, including certified<sup>1</sup> **ClickSeal** lids for glove-friendly, one-handed operation
- Manufactured with quality materials providing broad chemical resistance with exceptional strength for durability and reliability
- Low noise levels, including just 52 dBA at performance of 17,850 rpm/ 30,279 x g (with SL 8R centrifuge), to ensure a peaceful laboratory
- Conforms to the latest clinical and safety standards, such as UL, CE and IVD<sup>2</sup>
  - <sup>1</sup> Biocontainment certification by the Public Health England, Porton Down, UK
  - $^{\rm 2}$  See full list of standards & certifications on page 14





# Fits in. clinical applications. Stands out.

Outstanding capacity in a compact design with a smart, simple interface.



Thermo Scientific Rotor	Description	Stand-out Features	Perfor	mance
			VENTILATED	REFRIGERATED
TX-150 Swinging Bucket Rotor				
	Designed for a broad range of high-speed, high-capacity swing-out processing needs, with a capacity of 24 x 5/7 mL blood tubes per run and flexibility with a wide range of adapters.	Certified <sup>1</sup> sample protection with ClickSeal biocontainment lids.	4,500 rpm 3,260 x g	4,500 rpm 3,260 x g
M10 Swinging Bucket Rotor				
8 v 50 ml. Individually Sealed Fixed A	Centrifuge 4 microplates or 2 midi-deepwell plates, ideally suited for quick spins. Spin up to 4 standard microplates with optional certified¹ ClickSeal biocontainment lids.	Transportable microplate carriers, complemented by Auto-Lock rotor exchange.	4,400 rpm 2,576 x g	4,400 rpm 2,576 x g
8 x 50 mL Individually Sealed Fixed A	ngle Rotor			
E CO	Designed for high-risk sample processing for a range of clinical and research tubes.	Individual sealed canisters for high-risk samples.	n/a	5,600 rpm 5,014 x g

#### **CLINIConic Fixed Angle Rotor**



Spin 30 blood tubes or 15 mL conicals in a fixed angle configuration with fast acceleration to optimize blood separation applications.

Auto-Lock rotor exchange for ultimate ease-of-use.

4,400 rpm 3,030 x g 4,400 rpm 3,030 x g

### Hematocrit Rotor



Achieve red blood cell capillary separations.

Result reading chart provided.

13,300 rpm 16,810 x g 13,300 rpm 16,810 x g

1 Diocontainment certification by the Public Health England, Porton Down, UK

# Dedicated Rotors for Routine Clinical Processing



**TX-100S Clinical Swinging Bucket Rotor with Sealed Carriers** 

Spin 8 tubes with biocontainment sealing

Ventilated 4,500 rpm 3,260 x g Refrigerated 4,500 rpm 3,260 x g



# TX-100 Clinical Swinging Bucket Rotor with Carriers

Capacity of 16 tubes per run

Ventilated 4,500 rpm 3,260 x g Refrigerated 4,500 rpm 3,260 x g



# Rotors for Research Applications

Rotors for Research /	Applications			
Thermo Scientific Rotor	Description	Stand-out Features	Perforr VENTILATED	mance   REFRIGERATED
TX-150 Swinging Bucket Rotor				
	Designed for a broad range of swing-out processing needs at high speed and high capacity with the flexibility of a wide range of adapters.	Dedicated bucket available for 8 conical tubes capacity or round buckets with certified <sup>1</sup> ClickSeal biocontainment lids.	4,500 rpm 3,260 x g	4,500 rpm 3,260 x g
M10 Swinging Bucket Rotor				
	Centrifuge 4 standard microplates or 2 midi-deepwell plates, ideally suited for quick spins. Spin up to 4 standard microplates with optional certified¹ ClickSeal biocontainment lids. Non-shielded design for quick access to microplates.	Transportable microplate carriers, complemented by Auto-Lock rotor exchange.	4,400 rpm 2,576 x g	4,400 rpm 2,576 x g
MT-12 Swinging Bucket Rotor				
*	Design capable of spinning up to 12 x 1.5/2 mL microtubes and filtration columns, ideal for small-volume research applications.	Individual swinging bucket rotors for centralized pellets within tubes.	13,000 rpm 16,438 x g	13,000 rpm 16,438 x g
HIGHConic III Fixed Angle Rotor				
*	Process 6 x 50 mL tubes in fixed angle configuration and at RCF above 10,000 x g in certified sealed conditions.	New transparent lid enables viewing for added safety and convenience, and Auto-Lock rotor exchange enhances ease-of-use.	8,700 rpm 10,155 x g	9,500 rpm 12,108 x g
CLINIConic Fixed Angle Rotor				
MATTINE	Spin 30 x 15 mL round or conical tubes and ensure fast acceleration and throughput for cell culture applications.	Support conical tubes in a fixed angle rotor with the flexbility of Auto-Lock rotor exchange.	4,400 rpm 3,030 x g	4,400 rpm 3,030 x g
MicroClick 18 x 5 Rotor				
*	18-place capacity for 5.0 mL microtubes for high throughput and over 22,000 x g to reduce run times.	Lightweight and ergonomic ClickSeal biocontainment lid allows sample viewing.	n/a	14,000 rpm 22,351 x g
Micro-Volume Solution Rotors				
MicroClick 24 x 2 Fixed Angle Rotor	Capable of supporting micro-volume protocols, such as nucleic acid preparation, PCR reaction set-up and filtration columns, choose from the complete micro-volume rotor portfolio.	With Auto-Lock rotor exchange, switch from swing-out to a microtube rotor in as little as 3 seconds, coupled with security of certified ClickSeal	16,000 rpm 24,328 x g	17,850 rpm 30,279 x g
MicroClick 30 x 2 Fixed Angle Rotor		biocontainment lids.  Additionally, the MicroClick 30 x 2, is designed with an extended neck to accommodate 30 nucleic acid	14,000 rpm 21,694 x g	14,000 rpm 21,694 x g
8 x 8 PCR Strip Fixed Angle Rotor		filter columns.	15,000 rpm 17,860 x g	15,000 rpm 17,860 x g

# Stands out.

Extensive Rotor
Portfolio for
Application Flexibility

# Versatile Swinging Bucket Rotors







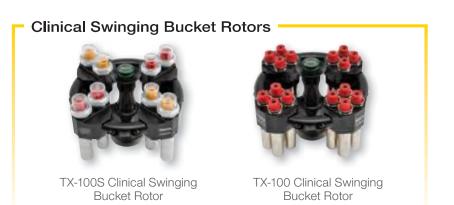
M10 Swinging Bucket Rotor



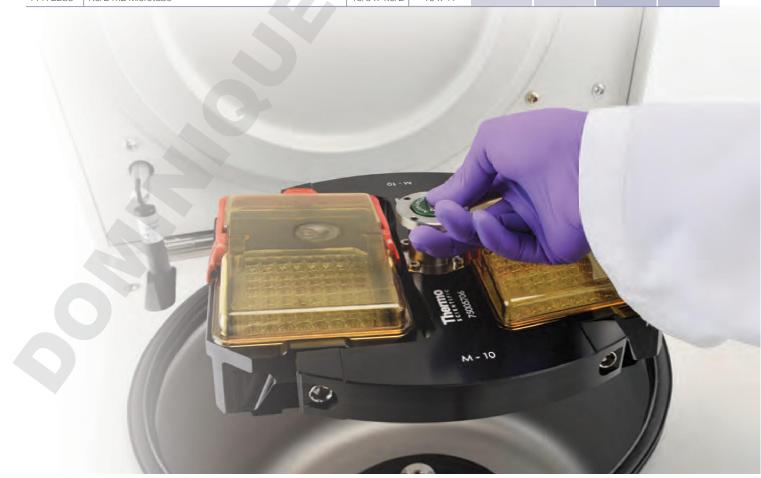
MT-12 Swinging Bucket Rotor



Cat. No.	Description	Rotor Capacity (places x volume, mL)	Max Tube Dimensions (0 x L, mm)	Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RC (x g)
rsatile S	winging Bucket Rotors			VENTI	LATED	REFRIG	ERATED
75005701	TX-150 Swinging Bucket Rotor, 90°, R <sub>max</sub> 144 mm (order buckets separately)	4 x 145	50 x 100	4,500	3,260	4,500	3,260
75005703	50 mL Conical Buckets (unsealed, no adapter needed) (set of 4)	8 x 50	29.5 x 120	4,500	3,260	4,500	3,260
75005702	Round Buckets (set of 4)	4 x 145	50 x 100	4,500	3,260	4,500	3,260
75005707	ClickSeal Biocontainment Lids for Round Buckets (set of 4)						
75005724	Replacement O-rings for Lids (set of 4)						
Adapters f	for 50 mL Conical Buckets (sets of 2)						
75005808	15 mL Conical Tube	8 x 15	17 x 123				
Adapters f	for Round Buckets (sets of 4)						
needed	145 mL Bottle (75005734)	4 x 145	50 x 100				
75005735	100 mL Round Bottom Open-Top Tube	4 x 100	45 x 117				
75005736	50 mL Conical or Skirted Tube	4 x 50	29.5 x 120				
75005744	25 mL Universal Flat/Skirted Tube	4 x 25	25 x 120				
75005737	15 mL Conical Tube	8 x 15	17 x 122				
75005737	11 mL IVF Tube	8 x 11	17 x 122				
75005738	14 mL Urine Tube	16 x 14	18 x 124				
75005738	12 mL Blood Collection Tube (Greiner™)	16 x 12	16 x 100				
75005738	10 mL Blood Collection or 15 mL Corex™/Kimble™ Tube	16 x 15	17 x 117				
75005739	5/7mL mL Blood Collection Tube	24 x 5/7	13 x 116				
75005740	3/5 mL Blood Collection Tube	28 x 3/5	12 x 124				
75005743	1.5/2 mL Microtube	40 x 2	11 x 65				
Rotor Pac	kages						
75005760	Cell Culture Package, INCLUDES: TX-150 Rotor (75005701), Round Buckets (75005702), Adapters for 50 mL Conical Tubes (75005736)	4 x 50	29.5 x 120				
75005761	High Capacity Cell Culture Package, INCLUDES: TX-150 Rotor (75005701), Conical Buckets (75005703), Adapters for 15 mL Conical Tubes (75005808)	8 x 50	18 x 124				
75005762	Clinical Rotor Package, INCLUDES: TX-150 Rotor (75005701), Round Buckets (75005702), ClickSeal Biocontainment Lids (75005707), Adapters for Blood Collection Tubes: 5/7 mL (75005739) and 10 mL (75005738)	24 x 5/7	18 x 124				
75005706	M10 Swinging Bucket Rotor, 90°, R <sub>max</sub> 119 mm (order buckets separately)		n/a	4,400	2,576	4,400	2,576
75005723	Unsealed Buckets (set of 2)	4 Standard or 2 Midi-Deepwell	Height < 33 mm				
75005721	Sealed Buckets (set of 2) R <sub>max</sub> 109mm	4 Standard or 2 Midi-Deepwel	Height < 33 mm				
75005600	MT-12 Swinging Bucket Rotor, 90°, R <sub>max</sub> 87 mm	12 x 2	11 x 50	13,000	16.438	13.000	16.43



	Cat. No.	Description	Rotor Capacity (places x volume, mL)	Max Tube Dimensions (0 x L, mm)	Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)
Clinical Swinging Bucket Rotors					VENTI	LATED	REFRIG	ERATED
*	75005704	TX-100S Clinical Swinging Bucket Rotor with Sealed Carriers, 90°, R <sub>max</sub> 144 mm	8 x 15	17 x 106	4,500	3,260	4,500	3,260
	75005705	TX-100 Clinical Swinging Bucket Rotor with Carriers, 90°, Rmax 144 mm	16 x 15	17 x 121	4,500	3,260	4,500	3,260
	Adapters f	or TX-100S Clinical Rotor and TX-100 Clinical Rotor (e	ach)					
	11203666	13.5 mL Urine Tube	16/8 x 13.5	16 x 82				
	11172596 5/7 mL BD Hemogard™/ BD Vacutainer™ Tube		16/8 x 5/7	13 x 106				
	11172595 5 mL BD Hemogard Tube		16/8 x 5	13 x 75				
	11172287	3 mL Blood Collection Tube	16/8 x 3	11 x 70				
	11172288 1.5/2 mL Microtube		16/8 x 1.5/2	10 x 41				



# **Fixed Angle Rotors**









HIGHConic III Rotor

8 x 50 mL Rotor

CLINIConic Rotor

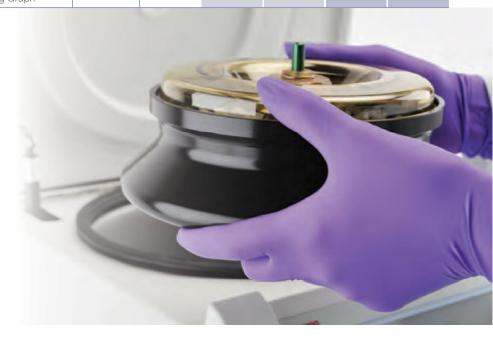
MicroClick 18 x 5 Rotor

	Cat. No.	Description	Rotor Capacity (places x volume, mL)	Max Tube Dimensions (0 x L, mm)	Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
Fixe	ed Angle F	Rotors			VENTILATED		REFRIGERATED		
*	75005709	HIGHConic III Rotor, 45°, R <sub>max</sub> 120 mm	6 x 50	30 x 121	8,700	10,155	9,500	12,108	
	75005731	Replacement Lid (each)							
	75003058	Replacement Sealing O-rings (set of 2 with grease)							
	Adapters fo	r HIGHConic III Rotor (set of 6)							
	75005745	38 mL Round Bottom Tube	6 x 38	25.5 x 110					
	75005746	16 mL Round Bottom Tube	6 x 16	18 x 123					
	75005755	15 mL Conical Tube	6 x 15	17 x 123					
	75005747	12 mL Round Bottom Tube	6 x 12	16 x 95					
	75005748	6.5 mL Round Bottom Tube	6 x 6.5	13.5 x 114					
	75005770	5 mL Conical Microtube	6 x 5	17 x 100					
	75005749	3.5 mL Round Bottom Tube	12 x 3.5	11 x 100					
	75005750	1.5/2 mL Microtube	12 x 2	11 x 40					
*	75003694	8 x 50 mL Individually Sealed Rotor 25°, R <sub>max</sub> 143 mm	8 x 50 Sealed	30 x 121	n/a	n/a	5,600	5,014	
	75003011	Replacement Biocontainment Lids (set of 2)							
	75003689	Replacement O-ring Kit							
	Adapters fo	Adapters for 8 x 50 mL Individually Sealed Rotor (set of 8)							
	75005755	15 mL Conical Tube	8 x 50	17 x 121					
	75005747	10 mL Blood Collection Tube (16 x 100 mm)	8 x 10	16 x 110					
	75005748	7 mL Blood Collection Tube (13 x 100 mm)	8 x 7	13 x 110					
	75005749	3.5 mL Blood Collection Tube	16 x 3.5	11 x 75					
	75003623	CLINIConic Rotor, 37°, R <sub>max</sub> 140 mm	30 x 15	16.5 x 131	4,400	3,030	4,400	3,030	
	Adapters fo	r CLINIConic Rotor (each)							
	no adapter needed	15 mL Round/Conical Bottom Tube	30 x 15	16.5 x 131					
	75003702	10 mL Round Bottom Tube	30 x 10	16.5 x 95					
	11172596	5/7 mL BD Hemogard/ BD Vacutainer Tube	30 x 5/7	13 x 106					
	11172595	5 mL BD Hemogard Tube	30 x 5	13 x 75					
*	75005765	MicroClick 18 x 5 Rotor, R <sub>max</sub> 102 mm	18 x 5	17 x 62	n/a	n/a	14,000	22,351	
	Adapters fo	r MicroClick 18 x 5 (set of 2)							
	75005756	1.5/2 mL Microtube	18 x 1.5/2	11 x 45					
	_								

# Fixed Angle Rotors MicroClick 30 x 2 Rotor 8 x 8 PCR Strip Rotor

MicroClick 24 x 2 Rotor

	Cat. No.	Description	Rotor Capacity (places x volume, mL)	Max Tube Dimensions (0 x L, mm)	Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)
Fixe	ed Angle I	Rotors			VENTI	LATED	REFRIG	ERATED
*	75005719	MicroClick 30 x 2 Rotor, 45°, R <sub>max</sub> 99 mm	30 x 1.5/2	11 x 45	14,000	21,694	14,000	21,694
	75005730	Replacement ClickSeal Biocontainment Lid (each)						
	75005726	Replacement O-ring for Lid (each)						
*	75005715	MicroClick 24 x 2 Rotor, 45°, R <sub>max</sub> 85 mm	24 x 1.5/2	11 x 45	16,000	24,328	17,850	30,279
	75005725	Replacement ClickSeal Biocontainment Lid (each)						
	75003405	Replacement O-ring for Lid (each)						
	Adapters fo	or MicroClick 30 x 2 Rotor and MicroClick 24 x	2 Rotor (sets o	of 30)				
	75005752	0.2 mL PCR Tube	30/24 x 0.2	6.5 x 20				
	75005753	0.5 mL Microtube	30/24 x 0.5	8 x 44				
	75005754	0.25 mL Microtube	30/24 x 0.25	6 x 46				
*	75005720	8 x 8 PCR Strip Rotor, 45°, R <sub>max</sub> 71 mm	8 x 8 PCR strips	8 x 8	15,000	17,860	15,000	17,860
	75005730	Replacement ClickSeal Biocontainment Lid (each)						
	75005726	Replacement O-ring for Lid (each)						
	75005733	Hematocrit Rotor, 90°, R <sub>max</sub> 85 mm, includes Linear Scale	24 Capillaries	n/a	13,300	16,810	13,300	16,810
	76000923	Capillaries (pack of 100)						
	75000964	Sealing Kit						
	76000938	Replacement Linear Scale Reading Graph						



Hematocrit Rotor

# Thermo Scientific SL 8 Centrifuge Series





Swing Bucket Rotors		
Max Capacity	4 x 145 mL (with TX-150 rotor)	4 x 145 mL (with TX-150 rotor)
Max Speed	4,500 rpm (with TX-150 rotor)	4,500 rpm (with TX-150 rotor)
Min Speed	300 rpm (with TX-150 rotor)	300 rpm (with TX-150 rotor)
Max RCF	3,260 x g (with TX-150 rotor)	3,260 x g (with TX-150 rotor)
Fixed Angle Rotors		
Max Capacity	6 x 50 mL (with HIGHConic rotor)	6 x 50 mL (with HIGHConic rotor)
Max Speed	16,000 rpm (with MicroClick 24 rotor)	17,850 rpm (with MicroClick 24 rotor)
Min Speed	300 rpm (with MicroClick 24 rotor)	300 rpm (with MicroClick 24 rotor)
Max RCF	24,328 x g (with MicroClick 24 rotor)	30,279 x g (with MicroClick 24 rotor)

Control System	Microprocessor				
Drive System	Direct, brushless induction drive				
Rotor Locking System	Auto-Lock rotor exchange				
Imbalance Detection System	Continuous vibration measurement, with rotor mass correction				
Programs	4 direct program buttons, with alphanumeric program naming	3 direct program buttons, plus 96 additional programs accessible via folder, all with alphanumeric program naming			
Pulse (Short) Run	Yes				
Acceleration / Deceleration Rates	2 (standard and soft)				
Centrifugation Chamber	Brushed stainless steel				
Max Timer Range	99h 59min, continuous				
Temperature Range	n/a	-10°C to 40°C			
Pre-Cooling Function	n/a	Yes, with direct button			
Refrigeration System	n/a	CFC free			
Sound Level	<58 dBA (with TX-150 rotor); <61 dBA (with MicroClick 24 rotor)	<56 dBA with all rotors; <52 dBA (with MicroClick 24 rotor)			
Other Features		eal biocontainment lids French, German, Italian, Russian and Spanish			
Max Power Consumption	310 W	750 W			
Dimensions					
Height (lid open)	67 cm (26.8 in)	70 cm (27.5 in)			
Height (lid closed)	31 cm (12.2 in)	32 cm (12.6 in)			
Width	37 cm (14.6 in)	46 cm (18.1 in)			
Depth	48 cm (18.9 in)	67 cm (26.4 in)			
Weight	35 kg (77 lb)	71 kg (156 lb)			
Standards & Certifications		·			
Standards	IEC 61010-1, IEC 61010-2-0	20, IEC 61010-2-101, EN 61326-1			
Certifications	UL Listed / CE marked / IVD compliant / Certified biocontainment <sup>1</sup>				
	of flotor, of married, the compliant, of model processing				

# **Ordering Information**

75007221	SL centrifuge, ventilated, 230 V, 50/60 Hz
75007220	SL centrifuge, ventilated, 120 V, 60 Hz
75007224	SL 8R, refrigerated, 230 V, 50/60 Hz
75007223	SL 8R, refrigerated, 120 V, 60 Hz

¹ ♦ Biocontainment certification by the Public Health England, Porton Down, UK



# Fits in. Stands out.

# Fits in. More centrifuge solutions for your lab

Perfect Fit. It's simple. From 1 Liter bottles, to 15 and 50 mL conical tubes and microplates, the versatile selection of **Thermo Scientific™ Nalgene™ and Nunc™ centrifugation products** work seamlessly with your complete centrifuge and rotor system, bringing together outstanding quality and performance.



# Thermo Scientific Benchtop Centrifuges

Accelerate your research with high speeds, rotor versatility and outstanding safety. From intuitive controls, to the certified Thermo Scientific ClickSeal biocontainment rotor lids that "click" in place, Thermo Scientific benchtop centrifuges deliver the perfect blend of capabilities to support micro-volume protocols, a wide range of high volume swing-out applications and high speed processing.

### Thermo Scientific MicroCL microcentrifuge series

Select from two available speed options, up to 17,000 x g for routine laboratory work, or 21,000 x g for high-end research applications, and our extensive rotor portfolio, including:

- Standard 24-place rotor supports 1.5 to 2.0 mL tubes and spin columns.
- $\bullet$  Unique dual row rotor holds 18 x 1.5/2.0 mL or 18 x 0.5 mL tubes, eliminating the need for adapters.

#### Thermo Scientific SL general purpose centrifuges

Improve performance and endurance with innovative technologies with 1.6 or 4 Liter capacity in a compact footprint.

- Support multiple users with the flexibility to adapt with evolving clinical and research needs, up to 196 x 5/7 mL blood tubes or 40 x 50 mL conical tubes in one spin.
- Lightweight Thermo Scientific<sup>™</sup> Fiberlite<sup>™</sup> carbon fiber rotors provide outstanding ergonomics and performance.

1 Biocontainment certification by the Public Health England, Porton Down, UK



#### thermoscientific.com/smallbenchcentrifuge

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