

# ESCO VERSATI™ TABLETOP CENTRIFUGES

TCV-1500 - Ventilated • TCR-1500 - Refrigerated

6 x 250 ml (fixed-angle) • 4 x 250 ml (swing-bucket rotor) • 2 x 3 MTP

Esco Versati™ Tabletop Ventilated Centrifuge (TCV) and Tabletop Refrigerated Centrifuge (TCR) also excel among the same level of products with their versatility, running features, and easy handling. It can act as different type of centrifuge to meet all your application needs—centrifuge for DNA precipitations, high-capacity and low-to-high speed general purpose centrifuge for cell application. Both have available fixed-angle and swing-bucket rotors with a maximum capacity of up to 6 x 250 ml (for fixed-angle rotor) and 4 x 250 ml (for swing-bucket rotor). In addition, both have an available microtiter plate rotor with maximum capacity of up to 6 plates. The tabletop ventilated centrifuge maximum speed and rcf is 15,000 rpm (21,382 x g) while the tabletop refrigerated centrifuge maximum speed and rcf is 16,000 rpm (24,320 x g).

## FEATURES

- Maintenance-free brushless motor
- ISOCIDE™ antimicrobial coating
- Genuine-Protec™ safety lid
- V-balance™ weight imbalance protection
- Versati™ microprocessor control system
- High-temperature control range (refrigerated model)
- Large storage space
- Audio & visual notification system
- Overspeed protection
- Over-temperature protection
- Automatic switch of temperature types
- Automatic conversion of rpm and rcf
- Various operation mode: short, continuous, time-setting
- Real-time modification of parameter

## TECHNICAL SPECIFICATIONS



### TCV-1500

Max. Speed	15,000 rpm
Max. RCF	21,382 x g
Max. Volume	6 x 250 ml
Speed Range	200-15,000 rpm
Acceleration/Deceleration Rate	10/10
Program Storage	99
Running Time	99 hr 59 min 10 sec
Temperature Range	Ambient
Dimensions (WxDxH)	438 x 532 x 374 mm
Weight	49 kg (108 lbs)



### TCR-1500

Max. Speed	16,000 rpm
Max. RCF	24,320 x g
Max. Volume	6 x 250 ml
Speed Range	200-16,000 rpm
Acceleration/Deceleration Rate	10/10
Program Storage	99
Running Time	99 hr 59 min 10 sec
Temperature Range	-20°C to 40°C
Dimensions (WxDxH)	715 x 528 x 373 mm
Weight	73 kg (161 lbs)



## ITEM NUMBERS

**TCV-1500:** 2220005 TCV-1500-8, 230 VAC, 50/60 Hz  
2220006 TCV-1500-9, 120 VAC, 50/60 Hz

**TCR-1500:** 2220007 TCR-1500-8, 230 VAC, 50/60 Hz  
2220008 TCR-1500-9, 120 VAC, 50/60 Hz

## ROTORS

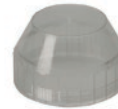
**ITEM NO: 1380022**  
**VST-ROT-009**  
Swing-bucket: 4 x 250 ml  
Angle: 0-90°



Acceleration: 34/309 s  
Deceleration: 36/458 s  
Max. Speed: 4,500 rpm  
Max. RCF: 3,780 x g  
Max. Radius: 16.7 cm  
Temp at Max. Speed: -2°C

## ADAPTERS AND ADDITIONAL ACCESSORIES

**ITEM NO: 1380079**  
**VST-ACS-009**  
Polycarbonate screw cap



**ITEM NO: 1380080**  
**VST-ACS-010**  
O-rings



Volume	250 ml	100 ml	50 ml	50 ml	50 ml	50 ml	50 ml	25 ml	25 ml
Tube type	Flat	Dome	Dome	Dome	Conical	Flat	Flat	Dome	Flat
ø (mm)	62	41	29	34	29	29 rim	29 rim	24.5	24.5 rim
Length in mm (min./max.)	110/130	95/120	95/120	100/120	100/120	100/120	100/120	100/120	85/100
No. of tubes per rotor	4	4	12	4	12	8	4	20	12
Radius correction (cm)	0.8	0.6	0.4	0.6	0.3	0.4	0.4	0.6	1.2
Item No:	1380033	1380034	1380035	1380041	1380038	1380039	1380042	1380036	1380044
Volume	15 ml	15 ml	15 ml	10 ml	9 ml	5-7 ml	6-7 ml	4-10 ml	1.5-2.0 ml
Tube type	Dome	Conical	Flat	Dome	Dome	Dome	Blood collection tubes	Blood collection tubes	Conical/Dome
ø (mm)	17	17	17 rim	16 rim	14	13	13	16	11
Length in mm (min./max.)	76/115	95/120	100/120	80/100	76/115	65/120	75/120	75/100	38
No. of tubes per rotor	36	28	28	32	36	56	40	32	36
Radius correction (cm)	0.4	0.4	0.6	0.4	0.4	0.8	0.8	0.4	1
Item No:	1380037	1380040	1380043	1380045	1380037	1380046	1380047	1380048	1380049

**ITEM NO: 1380105**  
**VST-ROT-020**  
Swing-bucket: 4 x 250 ml  
Angle: 0-90°



Acceleration: 34/316 s  
Deceleration: 36/240 s  
Max. Speed: 4,500 rpm  
Max. RCF: 3,735 x g  
Max. Radius: 16.7 cm  
Temp at Max. Speed: 2°C

SCREW CAP AND O-RINGS ARE NOT AVAILABLE IN THIS ROTOR

Volume	250 ml	50 ml	15 ml	6-10 ml	1.1-7.0 ml	1.5-2.0 ml
Tube type	Flat	Conical	Conical	Blood collection tube	Blood collection tube	Conical/Dome
ø (mm)	62	29	17	16	13	11
Length in mm (min./max.)	122	116	121	92/100	75/100	38
No. of tubes per rotor	4	16	40	48	56	36
Radius correction (cm)	0.9	0	0	0.6	0.6	1
Item No:	1380174	1380106	1380107	1380172	1380171	1380049

**ITEM NO: 1380023**  
**VST-ROT-010**  
Microtiter swing-bucket rotor  
Angle: 0-90°



Acceleration: 43/452 s  
Deceleration: 38/616 s  
Max. Speed: 4,500 rpm  
Max. RCF: 2,716 x g  
Max. Radius: 12.0 cm  
Temp at Max. Speed: -3°C

Suitable for the following plates:  
2 x 3 MTP  
2 x 3 MTP with lid  
2 x 2 Culture plate  
2 x 1 Microsonic system  
2 x 2 Microtest / Terasaki plate  
2 x 1 PCR plate (96-well) <-- PCR Strip (24 x 8)

**ITEM NO: 1380024**  
**VST-ROT-011**  
Fixed-angle: 24 x 1.5/2.0 ml  
Angle: 45°



Acceleration: 25/251 s (1.5ml); 30/249 s (2.0ml)  
Deceleration: 26/610 s (1.5ml); 27/635 s (2.0ml)  
Max. Speed: 15,000 rpm (TCV)/ 16,000 rpm (TCR)  
Max. RCF: 21,380 x g (TCV)/ 24,320 x g (TCR)  
Max. Radius: 8.5 cm  
Temp at Max. Speed: 3°C

Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
no adapter	1 x 1.5/2.0 ml conical	11	40
1380013	1 x 0.5 ml conical	8	45
1380014	1 x 0.2/0.4 ml PCR	6	45

ROTORS		ADAPTERS AND ADDITIONAL ACCESSORIES				
<b>ITEM NO: 1380025</b> *VST-ROT-012 Fixed-angle: 24 x 1.5/2.0 ml Angle: 45°		Acceleration: 25/251 s (1.5ml); 30/249 s (2.0ml) Deceleration: 26/610 s (1.5ml); 27/635 s (2.0ml) Max. Speed: 15,000 rpm (TCV)/ 16,000 rpm (TCR) Max. RCF: 21,380 x g (TCV)/ 24,320 x g (TCR) Max. Radius: 8.5 cm Temp at Max. Speed: 3°C	Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
			no adapter	1 x 1.5/2.0 ml conical	11	40
			1380013	1 x 0.5 ml conical	8	45
			1380014	1 x 0.2/0.4 ml PCR	6	45
<b>ITEM NO: 1380026</b> VST-ROT-013 Fixed-angle: 6 x 85 ml Angle: 38°		Acceleration: 85/697 s Deceleration: 70/2313 s Max. Speed: 11,000 rpm (TCV) / 13,000 rpm (TCR) Max. RCF: 15,550 x g (TCV) / 21,730 x g (TCR) Max. Radius: 11.5 cm Temp at Max. Speed: 6°C	Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
			no adapter	1 x 85 ml dome	38	113
			1380051	2 x 15 ml dome	17 rim	95/100
			1380052	1 x 15 ml dome	17 rim	103/110
			1380053	1 x 30 ml dome	25	90/103
			1380054	1 x 50 ml dome	29 rim	105
			1380055	1 x 50 ml conical	29 rim	118
			1380058	1 x 15 ml conical	17	120
			1380059	1 x 16 ml conical	18	103/110
<b>ITEM NO: 1380027</b> VST-ROT-014 Fixed-angle: 30 x 15 ml Angle: 35°		Acceleration: 25/149 s Deceleration: 20/985 s Max. Speed: 4,500 rpm Max. RCF: 2,830 x g / 2,468 x g Max. Radius: 12.5 cm / 10.9 cm Temp at Max. Speed: -12°C  <i>Note: Max of 20 tube capacity when used with adapter</i>	Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
			no adapter	1 x 15 ml conical/dome	17	120
			1380015	1 x 1.5/ 2.0 ml conical/dome	11	42
			1380056	1 x 4-7 ml blood collection tube	13.5 rim	95/115
1380057	1 x 1.8-5 ml blood collection tube	25	70/90			
<b>ITEM NO: 1380028</b> VST-ROT-015 Fixed-angle: 4 x 85 ml Angle: 30°		Acceleration: 60/506 s Deceleration: 49/1745 s Max. Speed: 12,000 rpm Max. RCF: 14,809 x g Max. Radius: 9.2 cm Temp at Max. Speed: 5°C	Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
			no adapter	1 x 85 ml dome	38	113
			1380052	1 x 15 ml dome	17 rim	103/110
			1380053	1 x 30 ml dome	25	90/103
			1380054	1 x 50 ml dome	29	105 mm
			1380055	1 x 50 ml conical	29	118 mm
1380058	1 x 15 ml conical	17	120 mm			
<b>ITEM NO: 1380029</b> VST-ROT-016 Fixed-angle: 6 x 250 ml Angle: 28°		Acceleration: 130/664 s Deceleration: 92/2906 s Max. Speed: 8,000 rpm Max. RCF: 10,016 x g Max. Radius: 14.0 cm Temp at Max. Speed: 3°C	Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
			no adapter	1 x 250 ml flat	62	122
			1380065	8 x 1.5/2.0 conical	11	40
			1380066	5 x 10 ml dome	16	80
			1380067	4 x 15 ml conical	17	120
			1380068	2 x 30 ml dome	26 rim	92
			1380069	1 x 50 ml dome	29	103
			1380070	1 x 50 ml conical	30	118
<b>ITEM NO: 1380030</b> VST-ROT-017 Fixed-angle: 6 x 50 ml Angle: 28°		Acceleration: 48/446 s Deceleration: 49/1323 s Max. Speed: 13,000 rpm Max. RCF: 15,869 x g Max. Radius: 8.4 cm Temp at Max. Speed: 0°C	Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
			no adapter	1 x 50 ml dome	29	95/115
			1380060	1 x 16 ml dome	18	100/105
			1380061	1 x 15 ml dome	17	100/105
			1380062	1 x 15 ml conical*	17.5	116/125
			1380064	1 x 30 ml dome	25	92/95
*used without rotor lid						
<b>ITEM NO: 1380031</b> VST-ROT-018 Fixed-angle: 20 x 10 ml Angle: 30°		Acceleration: 54/512 s Deceleration: 47/1439 s Max. Speed: 12,000 rpm Max. RCF: 15,775 x g Max. Radius: 9.8 cm Temp at Max. Speed: 0°C	Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
			no adapter	1 x 10 ml dome	16	80
<b>ITEM NO: 1380032</b> VST-ROT-019 Fixed-angle: 10 x 50 ml Angle: 38°		Acceleration: 115/753 s Deceleration: 72/2395 s Max. Speed: 9,000 rpm (TCV) / 10,500 rpm (TCR) Max. RCF: 11,771 x g (TCV)/ 16,022 x g (TCR) Max. Radius: 13.0 cm Temp at Max. Speed: 4°C	Item No.	Tube Size/Type	ø (mm)	Length in mm (min./max.)
			no adapter	1 x 50 ml conical	29	118
			1380015	1 x 1.5/2.0 ml conical	11	42
			1380056	1 x 4-7 ml blood collection tube	13.5 rim	95/115
			1380057	1 x 1.8-5 ml blood collection tube	13.5 rim	70/90
			1380178	1 x 15 ml conical	17	120
1380179	1 x 15 ml dome	17	103/123			

\*TÜV Nord Bioseal Certified Rotor

