Herolab

The High Speed Heroes

Manufacturer of Life Science Instruments since 1979



UniCen® HR

Extremely quiet due to unique flexible drive system



Super High-Speed Centrifuge

Refrigerated - 30,000 rpm / 70,434 x g

UniCen® HR Super High-Speed

➢ High-Speed Centrifuge with Flexible Axis!



→ This provides the best **smooth running**.

→ The separation of the own centering of the motor and the centering of the installed rotor protects the bearing of the entire drive system.

→ The centrifuge still requires routine inspection and servicing.

Catalog No.	Description		Voltage	Phases	Hz
21 14 075	**UniCen HR with Touchscreen Display**	**refrigerated**	**230 V**	**1**	**50 Hz**
21 14 077	UniCen HR with Touchscreen Display	refrigerated	208-230 V	1	60 Hz
21 14 076	UniCen HR with Touchscreen Display	refrigerated	115 V	1	60 Hz

Specifications Touchscreen Display see page 5

- **maximum capacity: 4 x 200 ml**
- for centrifuge tubes and bottles, Microtiter plates, Tissue-culture tubes, Microliter tubes, etc.
- 3 swing-out rotors, 1 microhematocrit rotor, 14 angle rotors
- **speed: 500 –30,000 rpm**
- **g-force (RCF): max. 70,434 x g**

Swing-out Rotors

UniCen® HR

Cat. No.	Type	Max. Capacity		Max. Speed	Max. g-Force
21 14 550	TS 2.6	2 – 6 microtiter plates (max. height 56 mm)	incl. 2 carriers for microtiter plates	3,000 rpm	1,036 x g
21 14 700	TS 24.2	24 x 2.2 ml	incl. windshield, hermetically sealing lid and 6 carriers for 4 tubes 2.2 ml	14,000 rpm	16,215 x g
21 14 600	TS 4.200	4 x 200 ml	incl. 4 buckets 200 ml with screw cap	5,000 rpm	4,081 x g
21 14 600-01	TS 4.200	4 x 200 ml	Rotor without buckets	5,000 rpm	4,081 x g
21 14 607	Trunnion rings	4 x (2 x 50 ml)	4 trunnion rings with stainless steel tubes	5,000 rpm	4,081 x g
21 14 605	Trunnion rings	4 x (7 x 15 ml)	4 trunnion rings with stainless steel tubes	5,000 rpm	4,081 x g

Cat.-No. 21 14 700





Cat.-No. 21 14 600-01
with 21 14 605
and 21 14 607



Cat.-No. 21 14 550



Cat.-No. 21 14 600

Microhematocrit Rotor (without photo)

UniCen® HR

Cat. -No.	Type	Max. Capacity		Max. Speed	Max. g-Force
21 14 750	TF 24 MH	24 Capillaries 50 µl Ø 1.5 x 75 mm	complete with rotor lid and capillary reader card	12,000 rpm	14,489 x g

Angle Rotors (H with hermetic sealing lid)

Cat. -No.	Type	Max. Capacity	Angle		Max. Speed	Max. g-Force
21 14 200	TF 12.8 H	12 PCR strips of 8 x 0.2 ml	45°	Reaction Vials	14,000 rpm	21,475 x g
21 14 175	TF 12.2 H Biosafe	12 x 1.5/2.2 ml	45°	Reaction Vials	30,000 rpm	70,434 x g
21 14 180	TF 18.2 H	18 x 1.5/2.2 ml	45°	Reaction Vials	24,000 rpm	46,043 x g
21 14 155	TF 24.2 Biosafe	24 x 1.5/2.2 ml	45°	Reaction Vials	20,000 rpm	36,447 x g
21 14 105	TF 30.2 Biosafe	30 x 1.5/2.2 ml	45°	Reaction Vials	17,000 rpm	30,371 x g
21 14 125	TF 12.5 Biosafe	12 x 5 ml	40 °	Reaction Vials	20.000 rpm	37.565 x g
21 14 251	TF 12.10 H	12 x 10 ml	35°		20,000 rpm	37,118 x g
21 14 455	TF 10.15 F Biosafe	10 x 15 ml Falcon	25°	Falcon tubes	14,000 rpm	19,831 x g
21 14 300	TF 20.15	20 x 15 ml	33°		4,000 rpm	2,463 x g
21 14 351	TF 30.15	30 x 15 ml	33°		4,000 rpm	2,463 x g
21 14 335	TF 12.30 Biosafe	12 x 30 ml	28°		12,800 rpm	19,233 x g
21 14 405	TF 6.50 F Biosafe	6 x 50 ml Falcon	25°	Falcon tubes	14,000 rpm	20,708 x g
21 14 505	TF 8.50 Biosafe	8 x 50 ml	25°		14,000 rpm	21,036 x g
21 14 655	TF 6.94 Biosafe	6 x 94 ml	30°		12,000 rpm	16,840 x g



Suitable **Tubes and Adapters** for these rotors you will find on the following pages.

SCAN ME



For detailed Information about the comprehensive range of **centrifuge tubes und bottles** from our production and their possible use in centrifuges of other manufacturers please refer to our catalog “Centrifuge Labware”.

We also manufacture the most popular tubes and bottles for Ultra Centrifuges.

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Specification	UniCen® HR
Maximum Capacity	4 x 200 ml
Maximum Speed	30,000 rpm
Max. g-Force/RCF (depending on rotor)	70,434 x g
Rotor Detection	**YES** - APRI™ System = Automatic positive rotor identification for Herolab rotors
Program Memory	**50 programs**
Preset Time	Touchscreen: h, m, 99:59
Preset Speed	From 500 rpm to max. speed or **HOLD (continuous) or SHORT (short runs)**
Preset g-Force/RCF	Direct setting
Drive System	**Direct self-centering drive system with brushless induction motor**
Speed Accuracy	± 2 rpm at 1,000 rpm / ± 20 rpm at max. speed
Acceleration Time (depending on rotor)	30 sec. – 1.5 min.
Deceleration Time (depending on rotor)	40 sec. – 2.5 min.
Acceleration/Deceleration Rates	9 Ramps in steps of 15 sec. from 0 to 120 sec. in the range of 0 – 1.000 rpm
Braking System	Dynamic electric brake system – Acoustic Signal at the end of run
Temperature Set Range	-20°C to +40°C in steps of 1°C-, T.min at maximum speed: <4°C, except Rotor TF 12.2
Cooling at Standstill, **Fast Cooling**	**YES,** **YES**
Temperature Control Accuracy	±2°C on calibrated rotor
Temperature Control System	Bypass System
Sample Protection	**YES**
Overheating Protection **1. Motor** **2. Rotor Chamber**	 **YES** **YES**
Refrigeration System	CFC-free refrigerant
Noise Level	57db A with TF 24.2 at 18.000 min^{-1}
Safety Features	- **Microprocessor controlled** - **Stainless Steel Chamber with additional inner guard ring** - **Overspeed detection and cut-off, Imbalance detection and cut-off** - **Motorized lid-lock system, four point lid fixing, Emergency lid-lock release** - **Overheating Protection**



Dimensions (W x D x H): in cm (in inches)	*64,0 x 55,0 x 36,0* *(25,2 x 21,7 x 14,2)*
Shipping Dimensions in cm (in inches)	*80,0 x 65,0 x 74,0* *(31,5 x 25,6 x 29,1)*
Net Weight	*82,0 kg (180,8 lbs.)*
Gross Weight	*96,0 kg (211,6 lbs.)*

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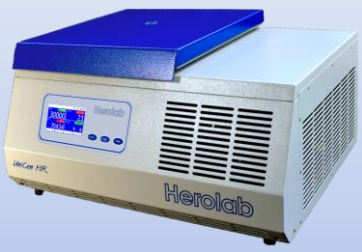

➢ **30,000 rpm / 70,434 x g**

& Extremely quiet

❖ Control Panels for UniCen® HR

Specifications	Touchscreen Control Panel 
Display	TFT-Monitor
User Interface	**Touchscreen**
Languages	German, English
Program Memory	50
Timer	h, m, 99:59
Real Run Time (RRT) display, Timer starts if set rotor speed is attained	✓ (selectable)
"**HOLD**" provision for longer runs	✓
"**SHORT**" for short runs	✓
RCF in x g	✓ (in steps of 10 x g)
Speed in rpm	✓ (in steps of 100 rpm)
RPM and RCF displayed	Both permanently shown
RPM, RCF, Time and Temperature	Current and preset values shown simultaneously
Rotor type, max. speed, Acceleration and Deceleration Rates	Permanently shown
Acceleration and Deceleration Rates, individually selectable	9 Ramps in steps of 15 sec. from 0 to 120 sec. in the range of 0 – 1.000 rpm
Dynamic electric brake system	✓
Fast Brake function with max. deceleration	✓
Temperature control range for instruments with refrigeration	-20°C to +40°C in steps of 1°C-, Tmin at maximum speed: <4°C, except Rotor TF 12.2
Cooling at standstill	✓
Fast pre-cooling program	✓
Sample Protection	✓
Overheating Protecting	✓
Automatic speed reduction if liquid density is set higher than 1.2 g/cm³	✓
Audible signal at end of run or failure message	✓ (selectable)
Automatic Lid opening at end of run	Selectable
Password protection	✓ (selectable)

➢ High-Speed Centrifuges with Flexible Axis!

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All products built by Herolab carry the CE sign.
Herolab is certified according to DIN EN ISO 9001:2015.

CE

WEEE-Reg.-No.
DE66734561

Herolab reserves the right to change technical specifications without prior notice.

2025-02

Tubes and Adapters for UniCen® HR UniCen® MR UniCen® M

for Rotors TF 12.2, TF 18.2, TF 24.2, TF 30.2 + TS 24.2

Tubes	2.0-2.2 ml	1.5 ml	0.5-0.7 ml	0.25-0.4 ml	0.2 ml
Tubes Ø x Length (mm)	11/13 x 40	11/13 x 40	8/10 x 28-31	Ø 6 mm	PCR® Tubes
Material of Tubes + **Herolab Cat. No.**	Tubes not available from Herolab	Tubes not available from Herolab	Tubes not available from Herolab	Tubes not available from Herolab	Tubes not available from Herolab
Necessary **Adapter**	---	---			
Herolab Cat. No.	**---**	**---**	**25 50 06**	**25 50 05**	**25 50 07**
Tubes per Adapter	-	-	1	1	1



Cat. No. 25 24 01 / 11 / 41 / 51









for Rotor TF 12.10

TF 20.15 + TF 30.15

Tubes	10 ml AOR	13.5 ml
Tubes Ø x Length (mm)	16 x 80	16 x 76
Material of Tubes + **Herolab Cat. No.**	PC: **25 24 01** PPCO: **25 24 11** PE: **25 24 41** PF: **25 24 51**	PC dickwandig: **25 24 80**
Necessary **Adapter**	---	---
Herolab Cat. No.	**---**	**---**
Tubes per Adapter / Rotor	- / 12	- / 12

15 ml Glass	**15 ml Falcon**
17 x 98	17 x 122
Tubes not available from Herolab	Tubes not available from Herolab
---	---
---	**---**
- / 20 resp. 30	- / 20 resp. 30



Cat. No. 25 29 51 / 61 / 65 / 71







for Rotor TF 12.30 TF 10.15 F TF 6.50 F

Tubes	30 ml AOR	15 ml Falcon
Tubes Ø x Length (mm)	25 x 92	17 x 122
Material of Tubes + **Herolab Cat. No.**	PC: **25 29 51** PPCO: **25 29 61** PE: **25 29 65** PF: **25 29 71**	Tubes not available from Herolab
Necessary **Adapter**	---	---
Herolab Cat. No.	**---**	**---**
Tubes per Adapter / Rotor	- / 12	- / 10

50 ml Falcon	50 ml AOR	30 ml AOR	15 ml Falcon
29 x 118	29 x 103	25 x 92	17 x 122
Tubes not available from Herolab	PC: **25 32 01** PPCO: **25 32 11** PE: **25 32 15** PF: **25 32 21**	PC: **25 29 51** PPCO: **25 29 61** PE: **25 29 65** PF: **25 29 71**	Tubes not available from Herolab
---		---	---
---	**25 53 82**	**25 50 62**	**25 53 80**
- / 6		1 / 6	1 / 6

Tubes and Adapters for UniCen® HR UniCen® MR UniCen® M

for Rotor TF 8.50

Tubes	50ml AOR	50 ml with rim	50 ml with cap	45 ml Glass	30 ml AOR	30 ml Glass	16 ml with rim	12/15 ml Glass
Tubes Ø x Length (mm)	29 x 103	29 x 103	29 x 103	28 x 102	25 x 92	24 x 105	18 x 100	18 x 102
Material of Tubes + **Herolab Cat. No.**	PC: **25 32 01** PPCO: **25 32 11** PE: **25 32 15** PF: **25 32 21**	PC: **25 31 00** PPCO: **25 31 60** PE: **25 31 30** PF: **25 31 51**	PC: **25 31 05** PPCO: **25 31 45**	Tubes not available from Herolab	PC: **25 29 51** PPCO: **25 29 61** PE: **25 29 65** PF: **25 29 71**	Tubes not available from Herolab	PC: **25 27 00** PPCO: **25 27 20** PE: **25 27 40** PF: **25 27 51**	Tubes not available from Herolab
Necessary **Adapter**	---	---	---					
Herolab Cat. No.	**---**	**---**	**---**	**25 58 00**	**25 50 61**	**25 55 60**	**25 50 50**	**25 55 50**
Tubes per Adapter / Rotor	- / 8	- / 8	- / 8	1 / 8	1 / 8	1 / 8	1 / 8	1 / 8

Tubes	10ml AOR	10 ml Glass	10 ml Glass	4.5/5 ml	3 ml Glass	1.5 ml	1 ml
Tubes Ø x Length (mm)	16 x 80	18 x 102	13 x 100	12 x 75	10 x 75	11 x 40	7 x 50
Material of Tubes + **Herolab Cat. No.**	PC: **25 24 01** PPCO: **25 24 11** PE: **25 24 41** PF: **25 24 51**	Tubes not available from Herolab	Tubes not available from Herolab	PPCO: **25 22 30**	Tubes not available from Herolab	Tubes not available from Herolab	Tubes not available from Herolab
Necessary **Adapter**			Rubber adapter				
Herolab Cat. No.	**25 50 30**	**25 55 40**	**25 55 30**	**25 50 11**	**25 55 10**	**25 50 10**	**25 50 00**
Tubes per Adapter / Rotor	1 / 8	1 / 8	1 / 8	2 / 16	2 / 16	2 / 16	4 / 32





Cat. No. 25 32 01 / 11 / 15 / 21



Cat. No. 25 31 05 / 45



Cat. No. 25 31 00 / 60 / 30 / 51

for Rotor TF 6.94

Tubes	94 ml	80 ml AOR
Tubes Ø x Length (mm)	38 x 102	38 x 105
Material of Tubes + **Herolab Cat. No.**	thick-walled PC: **25 32 80** PPCO: **25 32 60** thick-w. w. thread PC: **25 32 90**	PC: **25 32 41** PPCO: **25 32 45** PE: **25 32 47** PF: **25 32 49**
Necessary **Adapter**	---	---
Herolab Cat. No.	**---**	**---**
Tubes per Adapter / Rotor	- / 6	- / 6

Cat. No. 25 32 41 / 45 / 47 / 49





Tubes and Adapters for UniCen® HR UniCen® MR UniCen® M



Additional accessories for the rotor TS 4.200 on request respectively more tubes for all rotors see last page and/or pricelist.

for Rotor TS 4.200

Tubes	200 ml	200 ml	100 ml	100 ml	80 ml AOR/94ml	50 ml AOR	50 ml with rim	50 ml with cap
Max. Ø x Length (mm)	56 x 112	56 x 113	46 x 104	40 x 100/120	38 x 112	29 x 103	29 x 103	29 x 103
Material of Tubes + **Herolab Cat. No.**	PC: **25 33 71** PPCO: **25 33 73**	conical PC: **25 33 75** PPCO: **25 33 77**	Tubes not available from Herolab	PPCO RB/G: 25 33 00	PC: **25 32 41** PPCO: **25 32 45** PE: **25 32 47** PF: **25 32 49**	PC: **25 32 01** PPCO: **25 32 11** PE: **25 32 15** PF: **25 32 21**	PC: **25 31 00** PPCO: **25 31 60** PE: **25 31 30** PF: **25 31 51**	PC: **25 31 05** PPCO: **25 31 45**
Necessary **Adapter**	direct							
Herolab Cat. No.	---	**21 14 610**	**21 14 643**	**21 14 641**	**21 14 645**	**21 14 638**		
Tubes per Adapter / Rotor	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4		

Tubes	50 ml	50 ml Falcon	30 ml AOR	30 ml Glass	17 ml	13/15 ml	15 ml Falcon	9-10 ml /15 ml
Max. Ø x Length (mm)	35 x 100	29 x 118	25 x 92	24 x 110	16 x 102	17 x 110	17 x 122	17/20 x 90-110
Material of Tubes + **Herolab Cat. No.**	Tubes not available from Herolab	Tubes not available from Herolab	PC: **25 29 51** PPCO: **25 29 61** PE: **25 29 65** PF: **25 29 71**	Tubes not available from Herolab	thin-walled: PPCO: **25 26 20** thick-walled PC: **25 26 40**	Tubes not available from Herolab	Tubes not available from Herolab	Monovettes 17,1/19,4 x 60 / 110 Tubes not available from Herolab
Necessary **Adapter**							Use rotor buckets without lid! 	
Herolab Cat. No.	**21 14 640**	**21 14 637**	**21 14 631**		**21 14 622**		**21 14 628**	**21 14 625**
Tubes per Adapter / Rotor	1 / 4	1 / 4	2 / 8		7 / 28		3 / 12	4 / 16

Tubes	10 ml AOR	13.5 ml	7 ml	6 ml	5 ml	5 ml	1.5/2.2 ml	1.2 ml
Max. Ø x Length (mm)	17 x 75	17 x 75	12 x 100	13.5/17.5 x 100	13.5/17.5 x 75	12 x 75	11 x 40	9 x 66
Material of Tubes + **Herolab Cat. No.**	PC: **25 24 01** PPCO: **25 24 11** PE: **25 24 41** PF: **25 24 51**	Tubes not available from Herolab	Tubes not available from Herolab	Vacutainer Tubes not available from Herolab	Vacutainer Tubes not available from Herolab	PPCO: **25 22 30**	Tubes not available from Herolab	S-Monovette Tubes not available From Herolab
Necessary **Adapter**								
Herolab Cat. No.	**21 14 616**		**21 14 613**	**21 14 635**	**21 14 634**	**21 14 619**	**21 14 611**	**21 14 612**
Tubes per Adapter / Rotor	7 / 28		12 / 48	7 / 28	7 / 28	12 / 48	12 / 48	12 / 48

Please note: The design and color may differ at the time of the delivery.

Herolab Tubes for Rotors of the UniCen Series

Cat No.	Description	Pieces/Pack
25 20 20	Tubes 2,0 ml PC thick-walled UC, 8 x 51 mm,	50
25 21 40	Tubes 4,4 ml PPCO thin-walled UC, 11 x 60 mm	50
25 22 20	Tubes 4,4 ml PC thick-walled with thread UC, 4,4 ml, 11 x 60 mm	50
25 24 01	Tubes 10 ml PC-AOR with lid	10
25 24 11	Tubes 10 ml PPCO-AOR with lid	10
25 24 41	Tubes 10 ml PE-AOR with lid	10
25 24 51	Tubes 10 ml PF-AOR with lid	2
25 24 80	Tubes 13,5 ml PC, round bottom	10
25 26 20	Tubes 17,0 ml PPCO thin-walled, Ultra Centrifuge Tubes	50
25 26 40	Tubes 17,0 ml PC thick-walled, Ultra Centrifuge Tubes	50
25 27 00	Tubes 16 ml PC, round bottom / with rim	10
25 27 20	Tubes 16 ml PPCO, Round bottom / with rim	10
25 27 40	Tubes 16 ml PE, round bottom / with rim	10
25 27 51	Tubes 16 ml PF, round bottom / with rim	2
25 29 51	Tubes 30 ml PC-AOR with lid	10
25 29 61	Tubes 30 ml PPCO-AOR with lid	10
25 29 65	Tubes 30 ml PE-AOR with lid	10
25 29 71	Tubes 30 ml PF-AOR with lid	2
25 30 20	Tubes 38,5 ml PC thick-walled with thread UC, 25 x 89 mm	50
25 30 40	Tubes 38,5 ml PC, thick-walled UC, 25 x 89 mm	50
25 30 50	Tubes 38,5 ml PPCO, thin-walled UC, 25 x 89 mm	50
25 31 00	Tubes 50 ml PC, round bottom / with rim	10
25 31 05	Tubes 50 ml PC, round bottom / with rim and Loop Cap	10
25 31 30	Tubes 50 ml PE, round bottom / with rim	10
25 31 45	Tubes 50 ml PPCO, round bottom / with rim and Loop Cap	10
25 31 51	Tubes 50 ml PF, round bottom / with rim	2
25 31 60	Tubes 50 ml PPCO, round bottom / with rim	10
25 32 01	Tubes 50 ml PC-AOR with lid	10
25 32 11	Tubes 50 ml PPCO-AOR with lid	10
25 32 15	Tubes 50 ml PE-AOR with lid	10
25 32 21	Tubes 50 ml PF-AOR with lid	2
25 32 41	Tubes 80 ml PC-AOR with lid	10
25 32 45	Tubes 80 ml PPCO-AOR with lid	10
25 32 47	Tubes 80 ml PE-AOR with lid	10
25 32 49	Tubes 80 ml PF-AOR with lid	2
25 32 60	Tubes 94,0 ml PPCO thick-walled, Ultra Centrifuge Tubes	25
25 32 80	Tubes 94,0 ml PC thick-walled, Ultra Centrifuge Tubes	25
25 32 90	Tubes 94,0 ml PC thick-walled with thread, Ultra Centrifuge Tubes	25
25 33 20	Tubes 100 ml PC, round bottom / graduated	2
25 33 71	Bottles 200 ml PC, flat bottom, with lid	6
25 33 73	Bottles 200 ml PPCO, flat bottom, with lid	6
25 33 75	Bottles 200 ml PC, conical bottom, with lid	6
25 33 77	Bottles 200 ml PPCO, conical bottom, with lid	6

AOR	**Advanced Oak Ridge**	**PE**	**Polyethylene**	**PPCO**	**Polypropylene Copolymer**
PPCO	**Polypropylene Copolymer**	**PF**	**Polyflor®**	**PS**	**Polystyrene**
PC	**Polycarbonate**	**PP**	**Polypropylene**	**RB/G**	**Round Bottom/ Graduated Tubes**

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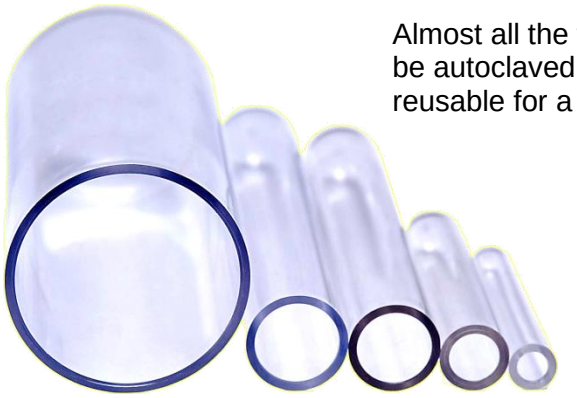
Herolab, founded in 1979, is a manufacturer of laboratory equipment and specialized in the production of centrifuges and rotors.

The production of a wide range of adapters as well as tubes and bottles complete the program and fits not only into our rotors but also in rotors from other manufacturers.

As the most important European manufacturer of these accessories for **High-Speed** as well for **Ultra-Centrifuge**s these products are made from high-quality plastics for the volume range from 2 ml to 1000 ml and are reusable for frequent application.





Almost all the tubes and bottles can often be autoclaved frequently and are therefore reusable for a longer period of time.

Contact us. We are sure to have the right solution for you.



Authorized Distributor:

Ask for our **Catalog Centrifuge Labware.**

Herolab
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