

AFI presents  
THE GENERATION

# LOREENA

MULTILAB CENTRIFUGES 4I

*From Experience comes Excellence*



2023





## LIA

Rotor 24 micro tubes  
15 000 Rpm/ 21 380 x g  
Ventilated & Refrigerated  
8 rotors

## LINA

Rotor 48 micro tubes  
Rotor 6x 50mL  
Rotor 6 Micro plates  
23 000 Rpm/ 39 625x g  
Ventilated & Refrigerated  
11 rotors

## SIRENA

24-36 tubes 5/7 mL  
6x 100mL  
18 000 Rpm/ 31514 x g  
Refrigerated  
Interactive display  
Touch screen, 99 programs,  
17 rotors

## ISA

40 tubes 5/7 mL  
6700 Rpm/ 6324 xg  
Ventilated & Refrigerated  
Touch Screen, 99 programs,  
11 rotors

Micro  
Research centers / Veterinaire



Performance  
Research centers/ Universities

Compact  
Small laboratories



**High Capacity**  
Blood bank / Industry



## KATRINA

**12 Liters**

**4900 Rpm/ 7301 x g**

**Refrigerated Floor**

Interactive communication, Touch screen,  
Integral, 6 Rotors



## LOREENA

**108- 200 tubes 5/7 mL / 12x 50 mL**

**16000 Rpm/ 28 335x g**

**Ventilated & Refrigerated & Floor**

Interactive communication,  
Click Spin, Touch Screen,  
15 Rotors



## LISA

**60-92 tubes 5-7 mL/ 8x100mL**

**18 000 Rpm/ 31514 x g**

**Ventilated & Refrigerated**

Interactive Communication, Click Spin, Touch  
Screen, 18 Rotors

Groups

**Routine**  
Hospitals/ Medical analysis Laboratories



# LOREENA

## Multilab Centrifuge ROUTINE-LINE

### MINIMIZED FOOT PRINTS, MAXIMIZED ERGONOMICS

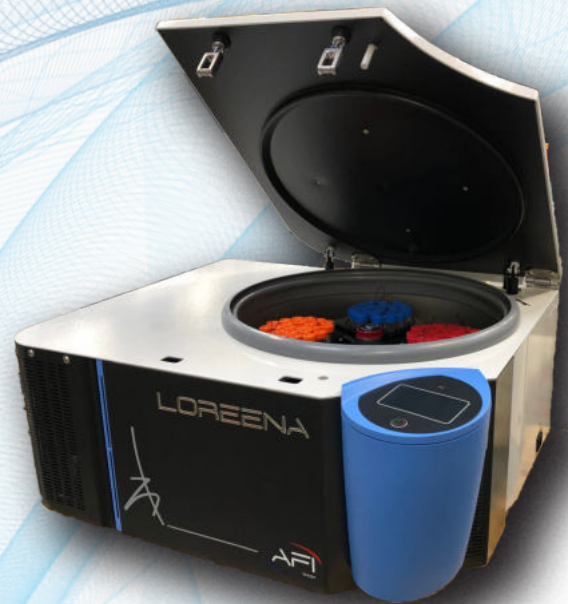
Very compact and with a small footprint **LOREENA** will help you to save space in your laboratory. The floor machines have a suitable height for a comfortable use. By design, a front foot passage allows an approach as close as possible to the tank, thus minimizing back curvatures during sample loading/unloading.

### ROUTINE LINE

With its large capacity (200 tubes 5/7mL) and high speeds, **LOREENA** brings you remarkable qualities for the routine processing of your samples. Safe, simple and comfortable operation on a daily basis.

### VERSATILITY AND HIGH CAPACITY

Thanks to its versatility and high capacity, **LOREENA** can also guarantee optimal centrifugation for Biochemistry with its 4 x 1 Liter bottles and its various standard tube adapters.



Centrifuge	Description	
<b>AFI-C300R-E</b>	LOREENA Centrifuge Refrigerated	
<b>AFI-C300RF-E</b>	LOREENA Centrifuge Refrigerated-Floor Model	
<b>AFI-C300RH-E</b>	LOREENA Centrifuge Heated	
<b>AFI-C300RFH-E</b>	LOREENA Centrifuge Heated-Floor Model	
Specifications	Swing-out rotor	Angular Rotor
Max Speed	4600rpm	16000rpm
Max RCF	4731g	28198g
Max Loading	4x1000ml	6x250ml
T° Range	-10°C/+40°C	
Dim. (HxWxD)	35x77x64cm (Floor Model 83x57x68cm)	
Pack dim.	54x80x78cm (Floor Model 100x74x78cm)	
Weight	145kg (Floor Model 170kg)	





# Our best seller centrifuge since 2017



## CLICK SPIN

The Best flexibility system to change accessories without tool

## INTERNATIONAL AUTOMATIC ELECTRICAL CORRECTION



International automatic correction of the electrical network. Guarantees stability of the machine's performance.

## INTERACTIVE DISPLAY



With its large touch screen and icons, LISA will help you to get started with the machine.

A real pleasure of simplicity.

# Its major assets

## 6 reasons

## to choose it



You too will be amazed by this ultra-quiet centrifuge. Let yourself be surprised!

## ULTRA SILENT CENTRIFUGE

Centrifuge's electronic functions integrated into a front central unit. Plug & play system guaranteeing a fast and efficient intervention

## THE BLUE BOX



## CUSTOMIZABLE PROGRAM

You can set up your own programs, name it, lock it, choose slope rate, set up your own user preferences.



# Swinging bucket rotors

## Accessories selection guide



LOREENA ACCESSORIES	AFI-RX750	AFI-RHD3	AFI-RX1000	AFI-RH-RA
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

LOREENA ACCESSORIES	AFI-B750	AFI-BXDW3	AFI-BHD3	AFI-B1L	AFI-BXDW4	AFI-BH-RA
Max Capacity (ml)	4x750mL	20 Microplates	28 Microplates	4x 1000mL	24 Microplates	
Max Charge (gr)	1000	800	1500	1750	950	1500
Max Speed (rpm)	4 600	4 600	4 600	3 500	4 200	4 600
Max RCF (g)	4 731	3 856	3 880	2 821	3 826	3 643
Cavity dim (ØxD) or (WxLxD)	Ø102x105	94x132x57	135x175x46	128x135x100	90x132x88	90x259x46
Lid	✓		✓	✓	✓	
Acc/ Dec (s)	86   68	74   62		86   68	72   70	

Tubes	ml	Ø x L	AFI-RX750	AFI-RHD3	AFI-RX1000	AFI-RH-RA
	1,1-1,4	8x82	82	-	260	-
	1,5-2	11x38	224	-	200	-
	1,5-2	12,5x40	132	-	260	-
	1,3	10x45				
	1,6-5	13x75-100	108	96	200	-
	5-7	13x100	108	-	200	-
	2,6-4,9	13x81-106	108	-	200	-
	1,2-5	11x82-108	108	-	200	-
	4-8,5	15x91-108	84	-	156	-
	7-10	16x100	84	-	156	-
	10	21x90	52	-	92	-
	15	17x120	56	-	19   24*	-
	30	25x110	28	-	40	-
	30	25x110	20	-	56	-
	30	25x95	28	-	56	-
	50	29x115	24   28*	-	28	-
	50	29x115	24	-	40	-
	50	29x107	28	-	40	-
	80 AOR AFI-T-PPCO80AOR	38x105	16	-	24	-
	80 OAK 85 OAK	38x106	16	-	24	-
	80 100	44x100 127	8	-	16	-





LOREENA ACCESSORIES	AFI-RX750	AFI-RHD3	AFI-RX1000	AFI-RH-RA		
						
LOREENA ACCESSORIES	AFI-B750	AFI-BXDW3	AFI-BHD3	AFI-B1L	AFI-BXDW4	AFI-BH-RA
Max Capacity (ml)	4x750mL	20 Microplates	28 Microplates	4x 1000mL	24 Microplates	
Max Charge (gr)	1000	800	1500	1750	950	1500
Max Speed (rpm)	4 600	4 600	4 600	3 500	4 600	4 600
Max RCF (g)	4 731	3 856	3 880	2 821	4 589	3 643
Cavity dim (ØxD) or (WxLxD)	Ø102x105	94x132x57	135x175x46	128x135x100	90x132x88	90x259x46
Lid	✓		✓	✓	✓	
Acc/ Dec (s)	86   68	74   62		86   68	72   70	

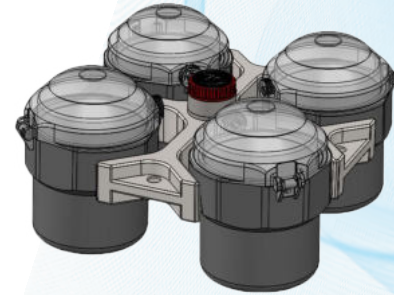
Bottles	ml	Ø x L	AFI-RX750	AFI-RHD3	AFI-RX1000	AFI-RH-RA
	150 FALCON	61x118	4	-	8	-
	200 FALCON	61x138	4	-	8	-
	200 AFI-B-PPCO200C	56x118	4	-	8	-
	200 NUNC/NALGENE	60x130	4	-	8	-
	200 AFI-B-PPCO200F	56x112	4	-	8	-
	250 CORNING	60x163	4	-	8	-
	250	65x115	4	-	8	-
	250 AFI-B-PPCO250F	62x122	4	-	8	-
	290 AFI-B-PPCO290F	62x137	4	-	8	-
	500 CORNING	96x148	4	-	4	-
	500 AFI-B-PPCO500F	98x114	4	-	4	-
	625 AFI-B-PPCO625F	92x130	4	-	4	-
	750 AFI-B-PPCO750F	92x130	4	-	4	-
	750 AFI-B-PPCO750FB	100x130	-	-	4	-
	950 AFI-B-PPCO950F	100x154	-	-	4	-
	Micro Plates		-	20	28	-
	Deep Well		-	4	4	-

\* Unsealed



# AFI-RX750

## Adapters selection guide



Model	V*	R
Max Capacity	4 x 750ml	
Angle	90°	
RPM Max	4 500	4 600
ACR Max	4 528	4 731

### Accessories



Ref.	AFI-RX750	AFI-B750	AFI-BXDW3	AFI-L750*
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\*Bucket lids are highly recommended with ventilated model for optimum performance

### Tubes

Capacity (ml)	1,1-1,4	1,5-2	1,5-2	1,3	1,6-7	2,6-4,9	1,2-3	4-8,5	7-10	10 CPT	10	15
∅ x L (mm)	8x82	11x38	12,5x40	10x45	13x75 100	13x81 106	11x82	15x91 108	16x100	16x125	21x90	17x120
Tubes per adapter / rotor	33 132	56 224	33 132	40 160	27 108		37 148	21 84		8 32 (L)	13 52	14 56

### Adapter

Hole ∅ x L (mm)	9x50	11,25x40	13x30	11x40	13,5x58	12,5x55	17x58	17x58	22x80	18x80
Radius	200	198	180	190	198	195	198	178	200	198
Max Charge (gr)	1000									
Ref.	AFI-3T1	AFI-3T2	AFI-3T2CRYO	AFI-3T1.3	AFI-3T5*	AFI-3T5ST*	AFI-3T10		AFI-3T10C	AFI-3T15C

\* For tube length > 80mm and ACR > 3000g, we preconise using adapter AFI-3T6 or AFI-3T6ST

### Tubes

Capacity (ml)	15	30	30	50	50	50	50	50	50	80	80 100	150 200
∅ x L (mm)	17x120	25x110	25x110	29x115	29x115	29x115	29x115	29x115	29x107	38x110	44x100 127	61x118 138
Tubes per adapter / rotor	16 64	7 28	5 20	7 28	6 24	6 24	7 28	6 24	7 28	4 16	2 8	1 4

### Adapter

Hole ∅ x L (mm)	18x80	26x60	26x60	30x70	30x70	30x70	30x70	30x70	30x70	40x78	46x80	62x80
Radius	200	198	198	198	198	198	198	185/200	198	198	198	182
Max Charge (gr)	1000											
Ref.	AFI-3T15ST	AFI-3T30S	AFI-3T30C	AFI-3T50S	AFI-3T50SL	AFI-3T50CSL*	AFI-3T50C	AFI-3T50CL	AFI-3T50AOR	AFI-3T80AOR	AFI-3T100R	AFI-3T200CF

\* For protocols < 3500g

### Tubes

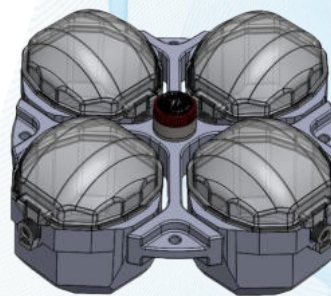
Capacity (ml)	200	200	200	250	250	250	290	500	500	625	750	750
∅ x L (mm)	56x118	60x130	56x112	60x163	65x115	62x122	62x137	96x148	98x114	92x130	98x152	100x130
Tubes per adapter / rotor	1 4	1 4	1 4	1 4	1 4	1 4		1 4	1 4	1 4	1 4	1 4

### Adapter

Hole ∅ x L (mm)	58x80	62x80	58x80	62x103	66x103	64x80	97x103	102x102	94x85	102x102	102x102
Radius	200	200	198	198	198	182	200	200	184	200	200
Max Charge (gr)	1000										
Ref.	AFI-3T200C	AFI-3T200CN	AFI-3T200F	AFI-3T250C	AFI-3T250G	AFI-3T290F	AFI-3T500C	-	AFI-3T625F	-	-

# AFI-RX1000

## Adapters selection guide



Model	V*	R
Max Capacity	4 x 1000ml	
Angle	90°	
RPM Max	3 500	3 500
ACR Max	2 821	2 821

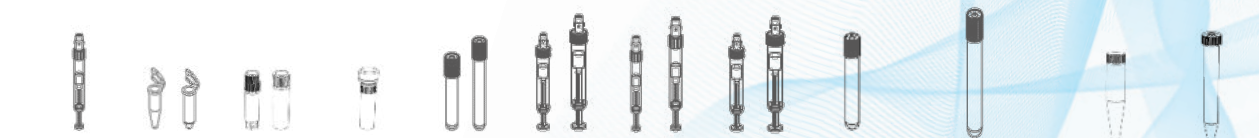
### Accessories



Ref.	AFI-RX1000	AFI-B1L	AFI-L1000*	BXDW4	LMP1000
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\*Bucket lids are highly recommended with ventilated model for optimum performance

### Tubes



	1,1-1,4	1,5-2	1,5-2	1,3	1,6-7	2,6-4,9	1,2-3	4-8,5	7-10	10 CPT	10	15
Capacity (ml)	1,1-1,4	1,5-2	1,5-2	1,3	1,6-7	2,6-4,9	1,2-3	4-8,5	7-10	10 CPT	10	15
Ø x L (mm)	8x82	11x38	12,5x40	10x45	13x75 100	13x81 106	11x82	15x91 108	16x100	16x125	21x90	17x120
Tubes per adapter / rotor	65 260	50 200	65 260	65 260	50 200		63 252	39 156		9 36 (L) / 15 60	23 92	24 96

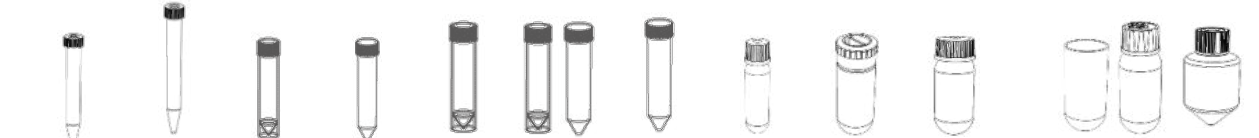
### Adapter



	AFI-4T1	AFI-4T2	AFI-4T2CRYO	AFI-4T1.3	AFI-4T5*	AFI-4T5ST*	AFI-4T10		AFI-4T10C	AFI-4T15C	
Hole Ø x L (mm)	9x50	11,25x40	13x30	11x40	13,5x58	12,5x55	17x58		17x58	22x80	18x80
Radius	206	196	182	186	195	191	188		178	201	198
Max Charge (gr)	1750										

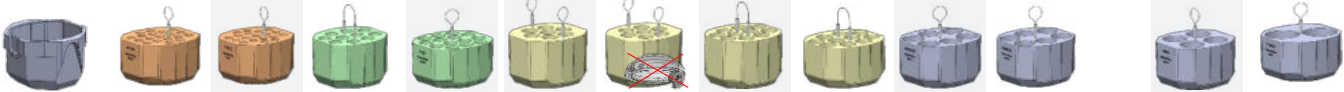
\* For tube length > 80mm and ACR > 3000g, we preconise using adapter AFI-4T6 or AFI-4T6ST

### Tubes



	15	15	30	30	50	50	50	50	80	85	80  100	150 200
Capacity (ml)	15	15	30	30	50	50	50	50	80	85	80  100	150 200
Ø x L (mm)	17x120	17x120	25x110	25x110	29x115	29x115	29x115	29x107	38x110	38x110	44x100 127	61x118 138
Tubes per adapter / rotor	19 76	26 104	10 40	14 56	7 28	10 40	10 40	10 40	6 24	6 24	4 16	2 8

### Adapter



	AFI-4T15CL	AFI-4T15ST	AFI-4T30S	AFI-4T30C	AFI-4T50S	AFI-4T50CS*	AFI-4T50C	AFI-4T50AOR	AFI-4T80AOR	AFI-4T80AOR	AFI-4T100R	AFI-4T200CF
Hole Ø x L (mm)	18x80	18x80	26x60	26x70	30x70	30x70	30x70	30x70	40x78	40x78	46x80	62x80
Radius	206	200	10	200	199	199	201	199	199	199	196	205
Max Charge (gr)	1750											

\* For protocols < 3500g

### Tubes



	AFI-B-PPC0200C NUNC / NALGENE	AFI-B-PPC0200F	CORNING	AFI-B-PPC0250F	AFI-B-PPC0290F	CORNING	AFI-B-PPC0500F	AFI-B-PPC0625F	AFI-B-PPC0750F	AFI-B-PPC0750FB	AFI-B-PPC0950FB	
Capacity (ml)	200	200	250	250	290	500	500	625	750	750	950	
Ø x L (mm)	56x118	60x130	56x112	60x163	62x122	62x137	96x148	98x114	92x130	98x152	100x130	100x154
Tubes per adapter / rotor	2 8	2 8	2 8	2 8	2 8		1 4	1 4	1 4	1 4	1 4	

### Adapter



	AFI-4T200C	AFI-4T200CN	AFI-4T200F	AFI-4T250C	AFI-4T290F	AFI-4T500C	AFI-4T750F	AFI-4T625F	AFI-4T750F	AFI-4T950F	
Hole Ø x L (mm)	58x80	62x80	58x80	62x103	64x80	97x103	100x102	94x85	100x102	102x102	
Radius	206	205	205	186	200	186	200	199	206	199	
Max Charge (gr)	1750										



# MICROPLATES

## Accessories selection guide

### AFI-RX750+ AFI-BXDW3 : 20 MICROPLATES

Model	V	R
Max Capacity	-	-
Angle	90°	
RPM Max	4 500	4 600
ACR Max	3 690	3 856



#### Microplate

Capacity (ml)	-	-	-	-
Max Height (mm)	-	65	65	-
Tubes per adapter / rotor	-	5 20	1 4	-

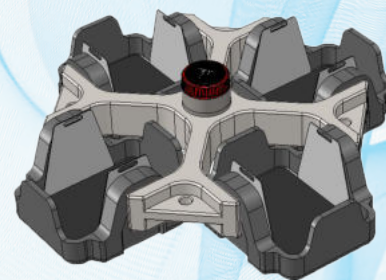
#### Accessories



Hole Ø x L (mm)	-	-	-
Radius	-	163	-
Max Charge (gr)	-	800	-

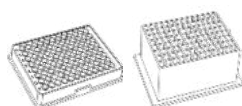
Ref.	AFI-RX750	AFI-BXDW3*
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\* Set of 4



### AFI-RHDW + AFI-BHDW : 10 MICROPLATES SEALED

Model	V	R
Max Capacity	-	-
Angle	90°	
RPM Max	4 500	4 600
ACR Max	3 532	4 536



#### Microplate

Capacity (ml)	-	-	-
Max Height (mm)	-	75	75
Tubes per adapter / rotor	-	5 10	1 2

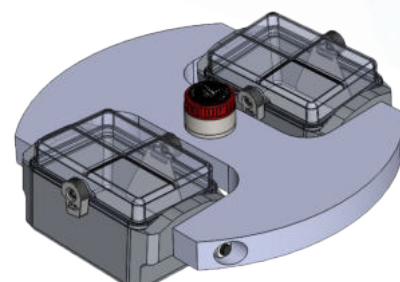
#### Accessories



Hole Ø x L (mm)	-	-	-
Radius	-	156	-
Max Charge (gr)	-	725	-

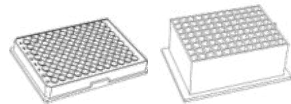
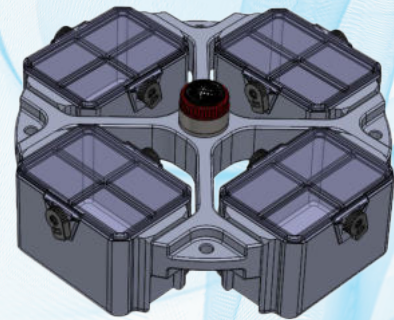
Ref.	AFI-RHDW	AFI-BHDW*	AFI-LH
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\* Set of 2



### AFI-RX1000+ AFI-BXDW4 : 24 MICROPLATES SEALED

Model	V	R
Max Capacity	-	-
Angle	90°	
RPM Max	4 200	4 200
ACR Max	3 826	3 826



#### Microplate

Capacity (ml)	-	-	-	-
Max Height (mm)	-	85	86.8	75
Tubes per adapter / rotor	-	6 24	2 8*	-

#### Accessories



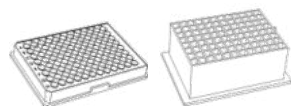
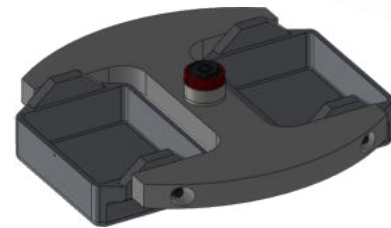
Hole Ø x L(mm)	-	-	-	-
Radius	-	194	-	-
Max Charge (gr)	-	950	-	-

Ref.	AFI-RX1000	AFI-BXDW4	LMP1000
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\* without lid

### AFI-RHD3+ AFI-BHD3 : 28 MICROPLATES SEALED

Model	V	R
Max Capacity	-	-
Angle	90°	
RPM Max	4 500	4 600
ACR Max	3 713	3 880



#### Microplate

Capacity (ml)	-	-	-
Max Height (mm)	-	95	95
Tubes per adapter / rotor	-	10 20	2 4

#### Accessories



Hole Ø x L(mm)	-	-
Radius	-	164
Max Charge (gr)	-	1500

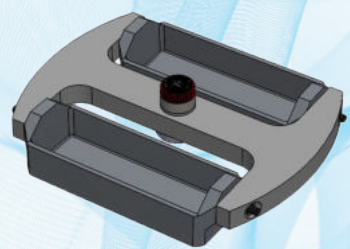
Ref.	AFI-RHD3	AFI-BHD3*
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\* Set of 2



# RACK

## Accessories selection guide



### AFI-RH-RA + AFI-BH-RA

Model	V	R
Max Capacity	-	-
Angle	90°	
RPM Max	4 500	4 600
ACR Max	3 486	3 643



Racks				WERFEN	WERFEN
Capacity (ml)	-	-	-	-	-
∅ x L (mm)	-	-	-	-	-
Rack per adapter / rotor	-	-	-	4 8	4 8

#### Accessories

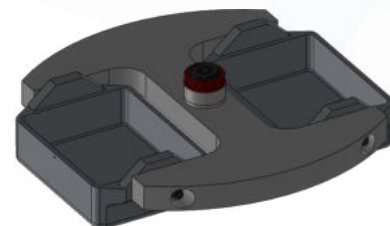


Hole ∅ x L(mm)	-	-	-	-	-
Radius	-	154	-	-	-
Max Charge (gr)	-	1500	-	-	-
Ref.	AFI-RH-RA	AFI-BH-RA	AFI-SH-RA	AFI-SH-RA-H	

\* Set of 2

### AFI-RHD3+ AFI-BHD3

Model	V	R
Max Capacity	-	-
Angle	90°	
RPM Max	4 500	4 600
ACR Max	3 713	3 880



Tubes				ABBOTT	ABBOTT	ABBOTT	STAGO
Capacity (ml)	-	-	-	-	-	-	-
∅ x L (mm)	-	-	-	-	-	-	-
Tubes per adapter / rotor	-	-	-	-	-	-	-

#### Accessories

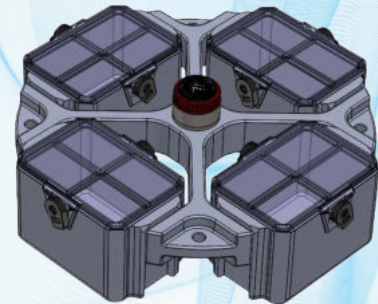




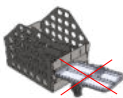
Hole ∅ x L(mm)	-	-	-	-	-	-	-
Radius	-	164	-	-	-	-	-
Max Charge (gr)	-	1900	-	-	-	-	-
Ref.	AFI-RHD3	AFI-BHD3	ON REQUEST	ON REQUEST	ON REQUEST	ON REQUEST	ON REQUEST

\* Set of 2

### AFI-RX1000 + AFI BXDW4

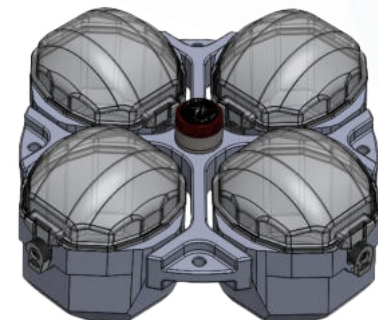
Model	V	R
Max Capacity	-	-
Angle	90°	
RPM Max	4 200	4 200
ACR Max	3 037	3 037






Racks			STAGO	OTHER
Capacity (ml)	-	-	-	-
∅ x L (mm)	-	-	-	-
Rack per adapter / rotor	-	-	4 16	-
Accessories				
Hole ∅ x L (mm)	-	-	-	-
Radius	-	154	-	-
Max Charge (gr)	-	950	-	-
Ref.	AFI-RX1000	AFI-BXDW4	AFI-HLDX4-1	ON REQUEST

### AFI-RX1000 + AFI-B1L

Model	V	R
Max Capacity	-	-
Angle	90°	
RPM Max	3 500	3 500
ACR Max	2 821	2 821



Racks			STAGO	OTHER
Capacity (ml)	-	-	-	-
∅ x L (mm)	-	-	-	-
Rack per adapter / rotor	-	-	3 12	-
Accessories				
Hole ∅ x L (mm)	-	-	-	-
Radius	-	206	-	-
Max Charge (gr)	-	1750	-	-
Ref.	AFI-RX1000	AFI-B1L	AFI-4T STAR	ON REQUEST



# FIXED ANGULAR ROTORS






## Accessories selection guide



LOREENA ACCESSORIES	AFI-RA6-250	AFI-RA8-100L	AFI-RA8-100L /45	AFI-RA12-50	AFI-RA14-15	AFI-RA8-50	AFI-RA8-50L	AFI-RA30-15
Max Capacity (ml)	6x250	8x100	8x100	12x50	14x15	8x50	8x50	30x15
Max Speed (rpm)	9 000	13 500	10 400	11 000	TBC	12 200	13 500	4 600
Max RCF (g)	13 131	23 432	16 566	8 533	TBC	16 973	20 783	3 336
Lid	✓	✓	✓	✓	✓		✓	
Acc / Dec (s)						89   150	82   183	26   29

Tubes	ml	Ø x L	AFI-RA6-250	AFI-RA8-100L	AFI-RA8-100L /45	AFI-RA12-50	AFI-RA14-15	AFI-RA8-50	AFI-RA8-50L	AFI-RA30-15
	1,1-1,4	8x82	-	16	16	36		24	24	-
	1,5-2	11x38	-	32	32	36		24	24	-
	1,5-2	12,5x40	-	32	32	36		24	24	-
	1,3	10x45	-	40	40	36		24	24	-
	1,6-5	13x75	48	16	16	12	14	8	8	30
	5-7	13x100	-	16	16	12	14	8	8	-
	2,6-4,9	13x81-106	-	16	16	12		8	8	-
	2,7-3	11x82		40	40	36		24	24	
	1,2-5	11x108	-	8	8	12		8	8	-
	4-8,5	15x91-108	-	16	16	12		8	8	-
	7-10	16x100	36	12	12	12	14	8	8	30
	10 OAK	16x85	48	8	8	12		8	8	-
	10	21x90	24	8	8	12		8	8	-
	15	17x120	30	8	8	12	14	8	8	30
	30	25x110	6	8	8	12		8	8	-
	30	25x110	6	8	8	12		8	8	-
	30 OAK	25x95	6	8	8	12		8	8	-
	50	29x115	6	8	8	12		8	8	-
	50 OAK	29x107	6	8	8	12		8	8	-
	80 OAK 85 OAK	38x106	6	8	8	-		-	-	-
	80 100	44x100-127	6	-	-	-		-	-	-
	250 AFI-B-PPC0250F	62x122	6	-	-	-		-	-	-



LOREENA ACCESSORIES			AFI-RA16-5	AFI-RA48-2	AFI-RA30-2
Max Capacity (ml)			16x5	48x2	30x2
Max Speed (rpm)			13 200	15 500	16 000
Max RCF (g)			21 038	27 129	28 335
Lid			✓	✓	✓
Acc / Dec (s)			49   92	50   94	44   72
<b>Micro Tubes</b>	ml	Ø x L			
	0,2-0,25	6x18	16	48	30
	0,5	8x30	16	48	30
	1,5-2	11x38	16	48	30
	5	16,5x60	16	-	-
	2 SPIN COLUMN	11x38	16	-	-

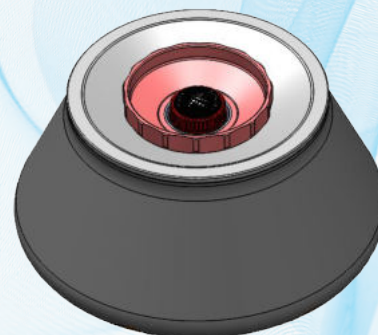


# FIXED ANGULAR ROTORS

## Accessories selection guide



### Angular rotor 6x250ml - 25° - Sealed



Model	R
Max Capacity	6 x 250ml
Angle	25°
RPM Max	9 000
ACR Max	13 131

#### Accessories



Ref.	AFI-RA6-250
------	-------------

#### Tubes



Capacity (ml)	1,6-5	7-10	10	10	15	30	30	30	50	50
∅ x L (mm)	13x75	16x100	16,2x85	21x90	17x120	25x110	25x110	25x95	29x115	29x115
Tubes per adapter / rotor	8 48	6 36	8 48	4 24	5 30	1 6	1 6	1 6	1 6	1 6
<b>Adapter</b>										
Hole ∅ x L (mm)	13,5x58	17x78	17x65	22x80	18x80	26x60	26x60	26,5x70	30x70	30x70
Radius	145	87 124	98 135	102 140	102 134	98 140	124	124	124	126
<b>Ref.</b>	AFI-250R5	AFI-250R10	AFI-250R10-OAK	AFI-250R10C	AFI-250R15C	AFI-250R30S	AFI-250R30C	AFI-250R30-OAK	AFI-250R50S	AFI-250R50C

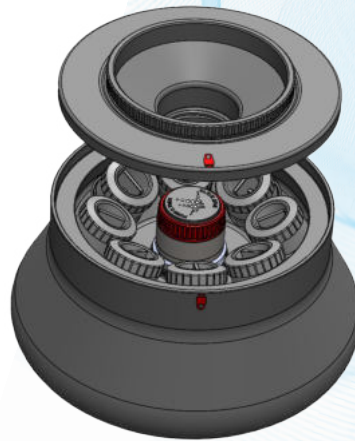
#### Tubes



Capacity (ml)	50	80 / 85	100	250
∅ x L (mm)	29x107	38x106	44x127	62x122
Tubes per adapter / rotor	1 6	1 6	1 6	1 6
<b>Adapter</b>				
Hole ∅ x L (mm)	30x70	39x68	46x80	63x110
Radius	145	126	127	130
<b>Ref.</b>	AFI-250R50-OAK	AFI-250R80-OAK	AFI-250R100R	-

### Angular rotor 8x100ml - 28° - Sealed

Model	V	R
Max Capacity	8 x 100ml	
Angle	28°	
RPM Max	12 500	13 500
ACR Max	20 089	23 432



Visual LOCK for PERFECT lid closure



#### Accessories



Ref.	AFI-RA8-100L
------	--------------

Tubes	1,1-1,4	1,5-2	1,5-2	1,3	1,6-5	2,6-4	2,7-3	5-7	4,9	4,5-5
Capacity (ml)	1,1-1,4	1,5-2	1,5-2	1,3	1,6-5	2,6-4	2,7-3	5-7	4,9	4,5-5
∅ x L (mm)	8x82	11x38	12,5x40	10x45	13x75	13x81 91	11x82	13x100	13x106	11x108
Tubes per adapter / rotor	2 12	4 24	4 24	5 30	2 12		5 30	2 12		1 6
Adapter										
Hole ∅ x L (mm)	9x50	11,25x40	13x30	11x40	13,5x58		12,5x55	13,5x78		12,5x80
Radius	106	87 103	83 104	90 105	87 103		89 105	87 103		108
Ref.	AFI-100R1-2	AFI-100R2-2	AFI-100R2CRYO-2	AFI-100R1,3-2	AFI-100R5-2		AFI-100R5ST-2	AFI-100R7-2		AFI-100R6ST-2

Tubes	10	4-5	7-10	5-8	10	15	30	30	30	50
Capacity (ml)	10	4-5	7-10	5-8	10	15	30	30	30	50
∅ x L (mm)	21x90	15x91	16x100	15x108	16x85	17x120	25x110	25x110	25x95	29x115
Tubes per adapter / rotor	1 6	2 12		1 6	1 6	1 6	1 6	1 6	1 6	1 6
Adapter										
Hole ∅ x L (mm)	22x80	17x78		17x80	17x70	18x80	26x60	26x60	26,5x70	30x70
Radius	106	87 103		107	87 103	95	96	96	94	101
Ref.	AFI-100R10C-2	AFI-100R10-2		AFI-100R10ST-2	AFI-100R10-OAK-2	AFI-100R15C-2	AFI-100R30S-2	AFI-100R30C-2	AFI-100R30-OAK-2	AFI-100R50C-2

Tubes	50	80	85
Capacity (ml)	50	80	85
∅ x L (mm)	29x107	38x106	38x106
Tubes per adapter / rotor	1 6	1 6	
Adapter			
Hole ∅ x L (mm)	30x70	39x68	
Radius	106	103	
Ref.	AFI-100R50-OAK-2	-	-



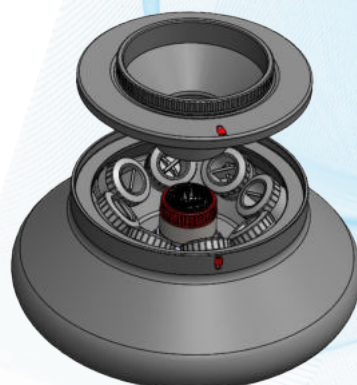
# FIXED ANGULAR ROTORS

## Accessories selection guide



### Angular rotor 8x100ml - 45° - Sealed

Model	V	R
Max Capacity	8 x 100ml	
Angle	45°	
RPM Max	10 400	10 400
ACR Max	16 566	20 028



Visual LOCK  
for PERFECT  
lid closure

#### Accessories



Ref.	AFI-RA8-100L
------	--------------

#### Tubes

Capacity (ml)	1,1-1,4	1,5-2	1,5-2	1,3	1,6-5	2,6-4	2,7-3	5-7	4,9	4,5-5
Ø x L (mm)	8x82	11x38	12,5x40	10x45	13x75	13x81 91	11x82	13x100	13x106	11x108
Tubes per adapter / rotor	2 12	4 24	4 24	5 30	2 12		5 30	2 12		1 6

#### Adapter

Hole Ø x L (mm)	9x50	11,25x40	13x30	11x40	13,5x58	12,5x55	13,5x78	12,5x80
Radius 106	87 103	83 104	83 104	90 105	87 103	89 105	87 103	108
Ref.	AFI-100R1-2	AFI-100R2-2	AFI-100R2CRYO-2	AFI-100R1.3-2	AFI-100R5-2	AFI-100R5ST-2	AFI-100R7-2	AFI-100R6ST-2

#### Tubes

Capacity (ml)	10	4-5	7-10	5-8	10	15	30	30	30	50
Ø x L (mm)	21x90	15x91	16x100	15x108	16x85	17x120	25x110	25x110	25x95	29x115
Tubes per adapter / rotor	1 6	2 12		1 6	1 6	1 6	1 6	1 6	1 6	1 6

#### Adapter

Hole Ø x L (mm)	22x80	17x78	17x80	17x70	18x80	26x60	26x60	26,5x70	30x70
Radius 106	95	87 103	107	87 103	95	96	96	94	101
Ref.	AFI-100R10C-2	AFI-100R10-2	AFI-100R10ST-2	AFI-100R10-OAK-2	AFI-100R15C-2	AFI-100R30S-2	AFI-100R30C-2	AFI-100R30-OAK-	AFI-100R50C-2

#### Tubes

Capacity (ml)	50	80	85
Ø x L (mm)	29x107	38x106	38x106
Tubes per adapter / rotor	1 6	1 6	

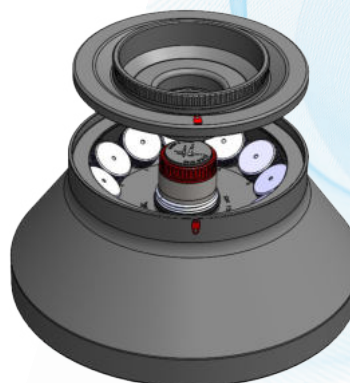
#### Adapter

Hole Ø x L (mm)	30x70	39x68	
Radius 106	98	103	
Ref.	AFI-100R50-OAK-2	-	-



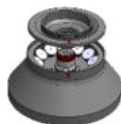
### Angular rotor 12x50ml - 35° - Sealed

Model	V	R
Max Capacity	12 x 50ml	
Angle	35°	
RPM Max	11 000	11 000
ACR Max	18 533	18 533



Visual LOCK for PERFECT lid closure

#### Accessories



Ref.	AFI-RA12-50L
------	--------------

Tubes											
Capacity (ml)	1,1-1,4	1,5-2	1,5-2	1,3	1,6-5	2,6-4	2,7-3	5-7	4,9	4,5-5	10
∅ x L (mm)	8x82	11x38	12,5x40	10x45	13x75	13x81 91	11x82	13x100	13x106	11x108	21x90
Tubes per adapter / rotor	3 36	3 36	3 36	3 36	1 12		3 36	1 12	1 12	1 12	1 12
Adapter											
Hole ∅ x L(mm)	9x50	11,25x40	13x30	11x40	13,5x58	12,5x55	13,5x78	13,5x78	12,5x80	22x80	
Radius	102	85 99	76 90	72 87	70 84	89	81 95	97	97	97	97
Ref.	AFI-50R1-2	AFI-50R2-2	AFI-50R2CRYO-2	AFI-50R1.3-2	AFI-50R5-2	AFI-50R5ST-2	AFI-50R7-2	AFI-50R7-2	AFI-50R7-2	AFI-50R6ST-2	AFI-50R10C-2

Tubes									
Capacity (ml)	4-8,5	7-10	10	15	30	30	30	50	50
∅ x L (mm)	15x91 108	16x100	16x85	17x120	25x110	25x110	25x95	29x115	29x107
Tubes per adapter / rotor	1 12		1 12	1 12	1 12	1 12	1 12	1 12	1 12
Adapter									
Hole ∅ x L(mm)	17x78	17x70	18x80	26x60	26x60	26,5x70	30x70	30x70	102
Radius	102	97	87	89	101	97	100	102	102
Ref.	AFI-50R10-2	AFI-50R10-OAK-2	AFI-50R15C-2	AFI-50R30S-2	AFI-50R30C-2	AFI-50R30-OAK-2	-	AFI-50R50-OAK-	

\* Set of 8



# FIXED ANGULAR ROTORS

## Accessories selection guide



### Angular rotor 8x50ml - 25°

Model	V	R
Max Capacity	8 x 50ml	
Angle	25°	
RPM Max	12 200	12 200
ACR Max	16 973	16 973

### Accessories



Ref.	AFI-RA8-50
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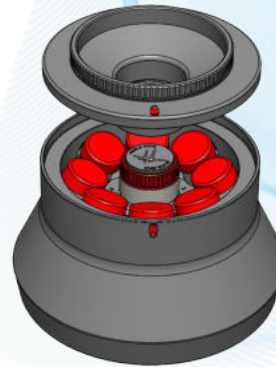


Tubes	1,1-1,4	1,5-2	1,5-2	1,3	1,6-5	2,6-4	2,7-3	5-7	4,9	4,5-5	10
Capacity (ml)	1,1-1,4	1,5-2	1,5-2	1,3	1,6-5	2,6-4	2,7-3	5-7	4,9	4,5-5	10
∅ x L (mm)	8x82	11x38	12,5x40	10x45	13x75	13x81 91	11x82	13x100	13x106	11x108	21x90
Tubes per adapter / rotor	3 24	3 24	3 24	3 24	1 8		3 24	1 8	1 8	1 8	1 8
Adapter											
Hole ∅ x L (mm)	9x50	11,25x40	13x30	11x40	13,5x58	12,5x55	13,5x78	13,5x78	13,5x78	12,5x80	22x80
Radius	102	83   97	74   88	71   85	69 82	87	80 90	95	95	95	95
Ref.	AFI-50R1-2	AFI-50R2-2	AFI-50R2CRYO-2	AFI-50R1.3-2	AFI-50R5-2	AFI-50R5ST-2	AFI-50R7-2	AFI-50R7-2	AFI-50R7-2	AFI-50R6ST-2	AFI-50R10C-2

Tubes									
Capacity (ml)	4-8,5	7-10	10	15	30	30	30	50	50
∅ x L (mm)	15x91 108	16x100	16x85	17x120	25x110	25x110	25x95	29x115	29x107
Tubes per adapter / rotor	1 8		1 8	1 8	1 8	1 8	1 8	1 8	1 8
Adapter									
Hole ∅ x L (mm)	17x78	17x70	18x80	26x60	26x60	26x60	26,5x70	30x70	30x70
Radius	102	95	85	97	99	95	98	102	#REF!
Ref.	AFI-50R10-2	AFI-50R10-OAK-2	AFI-50R15C-2	AFI-50R30S-2	AFI-50R30C-2	AFI-50R30-OAK-2	-	-	AFI-50R50-OAK-

### Angular rotor 8x50ml - 25° - Sealed

Model	V	R
Max Capacity	8x 50ml	
Angle	25°	
RPM Max	12 200	13 500
ACR Max	16 973	20 783



Visual LOCK for PERFECT lid closure



#### Accessories



Ref.	AFI-RA8-50L
------	-------------

<b>Tubes</b>											
Capacity (ml)	1,1-1,4	1,5-2	1,5-2	1,3	1,6-5	2,6-4	2,7-3	5-7	4,9	4,5-5	10
∅ x L (mm)	8x82	11x38	12,5x40	10x45	13x75	13x81 91	11x82	13x100	13x106	11x108	21x90
Tubes per adapter / rotor	3 24	3 24	3 24	3 24	1 8		3 24	1 8	1 8	1 8	1 8
<b>Adapter</b>											
Hole ∅ x L (mm)	9x50	11,25x40	13x30	11x40	13,5x58		12,5x55	13,5x78	13,5x78	12,5x80	22x80
Radius	102	83   97	74   88	71   85	69 82		87	80 90	95	95	95
Ref.	AFI-50R1-2	AFI-50R2-2	AFI-50R2CRYO-2	AFI-50R1.3-2	AFI-50R5-2		AFI-50R5ST-2	AFI-50R7-2	AFI-50R7-2	AFI-50R6ST-2	AFI-50R10C-2

<b>Tubes</b>									
Capacity (ml)	4-8,5	7-10	10	15	30	30	30	50	50
∅ x L (mm)	15x91 108	16x100	16x85	17x120	25x110	25x110	25x95	29x115	29x107
Tubes per adapter / rotor	1 8		1 8	1 8	1 8	1 8	1 8	1 8	1 8
<b>Adapter</b>									
Hole ∅ x L (mm)	17x78		17x70	18x80	26x60	26x60	26,5x70	30x70	30x70
Radius	102		95	85	97	99	95	98	102
Ref.	AFI-50R10-2		AFI-50R10-OAK-2	AFI-50R15C-2	AFI-50R30S-2	AFI-50R30C-2	AFI-50R30-OAK-	-	AFI-50R50-OAK-



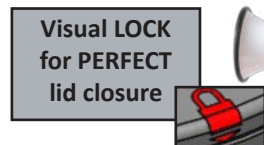


# FIXED ANGULAR ROTORS

## Accessories selection guide

### Angular rotor 14x 15ml -28°

Model	V	R
Max Capacity	14x 15ml	
Angle	28°	
RPM Max	TBC	TBC
ACR Max	TBC	TBC



#### Accessories






Ref.	AFI-RA14-15L
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#### Tubes

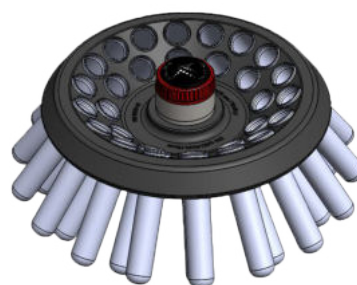
Capacity (ml)	1,6-5	5-7	7-10	15
∅ x L (mm)	13x75	13x100	16x100	17x120
Tubes per adapter / rotor	1 14	1 14	1 14	1 14

#### Adapter







				
Hole ∅ x L (mm)				
Radius	112	93	105	105
Ref.	AFI-15C5	AF-15C7	AFI-15C10	-

### Angular rotor 30x15ml - 37°

Model	V	R
Max Capacity	30 x 15ml	
Angle	37°	
RPM Max	4 500	4 600
ACR Max	3 192	3 336




#### Tubes

						
Capacity (ml)	-	5	1,6-5	5-7	10	14
∅ x L (mm)	-	12x75	13x75	13x100	16x100	17x100
Tubes per adapter / rotor	-	1 30	1 30	1 30	1 30	1 30

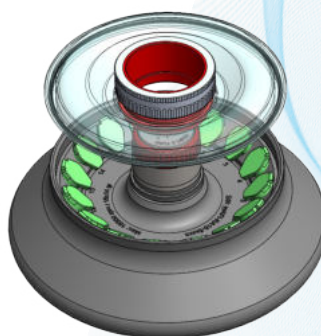
#### Accessories















						
Hole ∅ x L (mm)	18x98	13,5x78	13,5x78	17x78	17x78	18x98
Radius	122 141	96 115	96 115	110 129	110 129	118 136
Ref.	AFI-RA30-15					

### Angular rotor 16x5ml - 45° - Sealed

Model	V	R
Max Capacity	16 x 5ml	
Angle	45°	
RPM Max	13 200	13 200
ACR Max	21 038	21 038



Tubes						
	5	0,2	0,25	0,5	2	SPIN-COLUMNS
Capacity (ml)	5	0,2	0,25	0,5	2	2
∅ x L (mm)	16,5x60	6x18	7x39	8x30	11x38	11x38
Tubes per adapter / rotor	16	1 16	1 16	1 16	1 16	1 16
Accessories						
Hole ∅ X L(mm)	17x57		7x39	8,3x39	11,2x41	11,2x39
Radius	108	79	80	82	95	95
Ref.	AFI-RA16-5	AFI-5R025*	AFI-5R05*	AFI-5R05	AFI-5R2	AFI-5R2SC

\* Set of 16

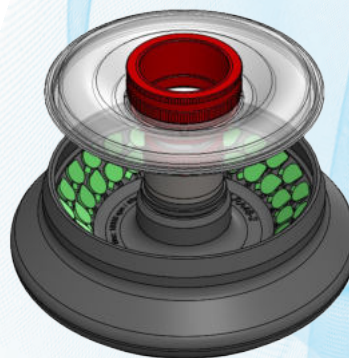


# FIXED ANGULAR ROTORS

## Accessories selection guide

### Angular rotor 48x2ml - 45° - Sealed

Model	V	R
Max Capacity	48 x 2ml	
Angle	45°	
RPM Max	14 000	15 500
ACR Max	22 132	27 129



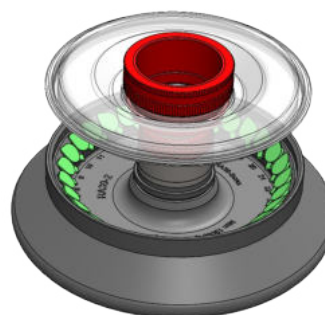
Tubes	SPIN COLUMN						
	1,5-2		2	0,2	0,25	0,5	1,5-2
Capacity (ml)	1,5-2		2	0,2	0,25	0,5	1,5-2
∅ x L (mm)	11x38		6x18	6x18	7x39	8x30	11x38
Tubes per adapter / rotor	48		1 48	1 48	1 48	1 48	48
Accessories							
Hole ∅ X L(mm)	11,2x41			7x39	8,3x39	11,2x41	
Radius	91 101		89 99	89 99	89 99	91 101	
Ref.	AFI-RA48-2		AFI-2R02*	AFI-2R025*	AFI-2R05*	AFI-RA48-2 NUNC	

Available for NUNC tubes



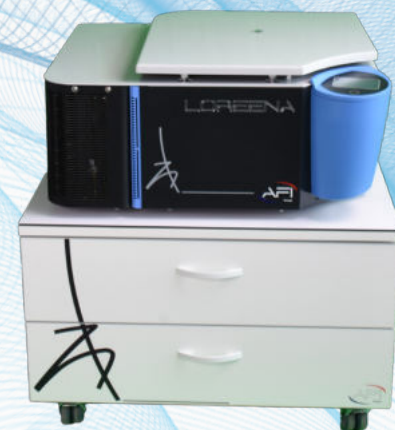
### Angular rotor 30x2ml - 45° - Sealed

Model	V	R
Max Capacity	30 x 2ml	
Angle	45°	
RPM Max	15 300	16 000
ACR Max	25 910	28 335



Tubes	SPIN COLUMN					
	1,5-2		2	0,2	0,25	0,5
Capacity (ml)	1,5-2		2	0,2	0,25	0,5
∅ x L (mm)	11x38		6x18	6x18	7x39	8x30
Tubes per adapter / rotor	30		1 30	1 30	1 30	1 30
Accessories						
Hole ∅ X L(mm)	11,2x41			7x39	8,3x39	
Radius	99		97	97	97	
Ref.	AFI-RA30-2		AFI-2R02*	AFI-2R025*	AFI-2R05*	

\* Set of 6



	SMALL	MEDIUM	LARGE
Ref.	AFI-MT550	AFI-MT750	AFI-MT850
Dimensions wxhxd (mm)	550x560x700	750x560x700	850x560x700
	2 tiroirs, 4 roulettes avec frein / 2 drawers, 4 wheels with brake		
LINA V	✓		
LINA R	✓		
ISA V	✓		
ISA R	✓		
SIRENA	✓		
LISA V	✓		
LISA R		✓	
LOREENA V		✓	
LOREENA R			✓

We offer you a range of AFI furniture dedicated to your centrifuges.

These furniture have been designed to last.  
They are reinforced with a metal frame to ensure robustness.

They are equipped with 4 castors with brakes for more mobility and flexibility in your laboratory.





The large drawers allow you to place all your accessories.

These furniture are for you !





Spécifications - Specifications						
Modèle - Model	Ventilé - Ventilated		Réfrigéré -Refrigerated Thermostatée- Heating		Réfrigéré de sol Refr-Floor Thermostatée de sol – Heating Floor	
Centrifugeuses de paillasse et de sol <i>Benchtop &amp; Floor centrifuges</i>						
Référence - Reference	AFI-C300V-E	AFI-C300V	AFI-C300R-E AFI-C300RH-E	AFI-C300R AFI-C300RH	AFI-C300RF-E AFI-C300RFH-E	AFI-C300RF AFI-C300RFH
Reference IVD *	AFI-C300VE/IVD	AFI-C300V/IVD	AFI-C300RE/IVD	AFI-C300R/IVD	AFI-C300RF-E/IVD AFI-C300RFH/IVD	AFI-C300RF/IVD AFI-C300RF/IVD
Caractéristiques électriques - Electrical specifications						
Tension nominale - Nominal voltage (+/- 10%)	230 V	120 V	230 V	120 V	230 V	120 V
Fréquence - Frequency	50 / 60 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Puissance alimentation max. - Power max.	1000 W		1700 W (800W compressor)		1700 W (800W compressor)	
Conformité aux directives Européennes - Compliance with European directives						
(UE)2017/746: Dispositifs médicaux de diagnostic in vitro <i>In vitro diagnostic medical devices</i> *Only the IVD References	✓		✓		✓	
2014/35/UE : Directive Basse Tension – Low Voltage Directive	✓		✓		✓	
2014/30/UE : Directive CEM - EMC directive	✓		✓		✓	
2012/19/CE : Directive DEEE - WEEE directive	✓		✓		✓	
2011/65/CE : Directive ROHS - ROHS Directive	✓		✓		✓	
IEC / EN61010-1 (2010) : Sécurité - Safety	✓		✓		✓	
IEC / EN61010-2-020 (2006) : Sécurité - Safety	✓		✓		✓	
IEC / EN61010-2-101 (2015) : Sécurité - Safety	✓		✓		✓	
EN61326-1(2013) : Compatib. électromagn.- EMC compatibility	✓		✓		✓	
EN55011 2009/A1 (2010) Classe A : Perturbations / Emissions	✓		✓		✓	
EN ISO 14971 (2012) : Gestion des risques - Risk management	✓		✓		✓	
ISO 9001 (2015) : Gestion des risques - Risk management	✓		✓		✓	
ISO 13485 (2016): Gestion des risques - Risk management	✓		✓		✓	
Caractéristiques principales (voir brochure) - Main specifications (see brochure for full specification)						
 Rotors Swing-out <i>Swing-out rotors</i>	Capacité max. <i>Max. capacity</i>	AFI-RX1000 + AFI-B1L	4x 1000mL			
	RPM max.	AFI-RX750	4600 Rpm		4731 g	
	ACR max <i>Max. RCF</i>					
 Rotors Microplaques <i>Microplate rotors</i>	Capacité max. <i>Max. capacity</i>	AFI-RHD3	14x2 Microplates / 4x2 Deep Well			
	RPM max.	AFI-RHD3	4600 rpm		4600 rpm	
	ACR max <i>Max. RCF</i>		3713 g		3880 g	
 Rotors Angulaires Fixed <i>angle rotors</i>	Capacité max. <i>Max. capacity</i>	AFI-RA6-250	6x 250mL			
	RPM max.	AFI-RA30-2	15300 rpm		16000 rpm	
	ACR max <i>Max. RCF</i>		25910 g		28335 g	
Couvercles - Lids			✓			
Dimensions & poids - Dimensions & Weight						
Dimensions (HxLxL) - Foot print Dimensions (HxWxD)	36 x 50 x 65 cm		35 x 77 x 64 cm		83 x 57 x 68 cm	
Profondeur Table – Table deep	60 cm		60 cm		/	
Dimensions emballage (HxLxL) - Package dimension (HxWxD)	54 x 74 x 78 cm		54 x 80 x 78 cm		100 x 74 x 78 cm	
Hauteur couvercle ouvert - Opened lid height	79 cm		80 cm		139 cm	
Poids net - Weight unpacked	82 kg		145 kg		170 kg	
Poids emballé - Weight packed	97 kg		160 kg		185 kg	

Description de la centrifugeuse / Centrifuge description						
Référence - Reference	AFI-C300V-E	AFI-C300V	AFI-C300R-E	AFI-C300R	AFI-C300RF-E	AFI-C300RF
Ecran graphique tactile 4.3", couleur <i>4.3" graphic color screen</i>				✓		
Commandes <i>Commands</i>			Touches et écran tactile <i>Buttons and touchscreen</i>			
Contrôle par microprocesseur <i>Microprocessor control</i>				✓		
Fixation de rotor sans outil / <i>Toolless rotor fixing</i>			Système "ClickSpin®"			
Reconnaissance automatique du rotor <i>Automatic rotor recognition</i>				✓		
Détection de balourd <i>Imbalance detection</i>		Calibration ajustable (15g swing out et 3g rotors angulaires). Neutralisation automatique des vibrations liées à l'environnement. <i>Tunable calibration (15g for swing out &amp; 3g for angular rotors). Automatic neutralization of vibrations due to environment</i>				
Mode économie d'énergie <i>Energy saving mode</i>				Mode "Postcool" désactivable <i>Desactivable "Postcool" mode</i>		
Fermeture motorisée du couvercle / <i>Motorized lid closing</i>				✓		
Durées de cycle <i>Cycle duration</i>			10 s à 99h:59min:59s & Impulsion <i>10 s to 99h:59min:59 s &amp; Pulse</i>			
Unités de température <i>Temperature units</i>			°C / °F			
Chambre de centrifugation <i>Centrifugation chamber</i>			Inox			
Densité max. <i>Max. density</i>			1.2 g / cm <sup>3</sup>			
Moteur à induction sans charbon <i>Brushless induction motor</i>				✓		
Vitesse mini / Maxi <i>Mini / Max Speed</i>		300 / 15300 rpm		300 / 16000 rpm		
Pas de réglage de la vitesse <i>Speed setting step</i>			10 rpm/ 10x g			
Précision de vitesse <i>Speed accuracy</i>			± 0.5%			
Nombre de programmes <i>Programs number</i>		99		99+2		
Fonction Pulse <i>Pulse (short run)</i>				✓		
Pentes d'accélération & de freinage <i>Acceleration &amp; Braking slopes</i>			10 & 10			
Décélération libre <i>Brakeless mode</i>				✓		
Système de réfrigération <i>Cooling system</i>		Ventilation <i>Ventilation device</i>		Sans CFC <i>CFC free</i>		
Plage de réglage en température <i>Range of setting temperature</i>		N/A		-20°C → +40°C		
Echauffement (en C°) de l'échantillon a vitesse max pour T° ambiante 23°, Durée de fonctionnement en continu 45 mn. *performance optimale atteinte avec couvercle de nacelle  <i>Sample heating (C°) at max speed, 23° ambient temperature, Continuous operating time 45mn *optimum performance achieved with bucket lid</i>		15		N/A		
Alarme de surtempérature différentielle <i>Overtemperature alarm menu</i>		N/A		Ajustable de +5° à +20°C <i>Ajustable from +5° to 20°C</i>		
Fonction de pré-refroidissement <i>Precool function</i>		N/A		✓		
Précision en température <i>Temperature accuracy</i>		N/A		+/- 2°C		
Dissipation de chaleur maximale <i>Heat dissipation</i>		3413 BTU/h		5801 BTU/h		
Niveau sonore max. <i>Max. noise</i>		≤ 61 dB (A)		≤ 56 dB (A)		≤ 56 dB (A)



# LOREENA

*From Experience comes Excellence*



**BLOOD BANK**

Centrifuge 4L



# LOREENA

## Blood Bank Centrifuge

### Blood Bank Centrifuge

LOREENA benefits from all the AFI's experience for blood bank center and Biotherapies applications. It allows you to centrifuge **4 bags of 500mL & 600 mL and up to 8 bags of 450 mL.** It meets all your validated protocols to separate Plasma, Buffycoat, Red Blood Cell. These protocols come standard and pre-programmed into your machine.

### QUALITY THAT SPEAK FOR ITSELF

The «IDEM» application coupled with PFC (Power Factor Control) technology ensures a reproducibility of your cycles making LOREENA an ideal centrifuge for simplified blood processing productivity

### INTERACTIVE COMMUNICATION

With its large «Smartphone» touch screen colour display, LOREENA ensures interactive communication between you and the machine. Backlit display for better visibility Programming is greatly facilitated by direct access to all cycle parameters in a single window. Compatible with gloved hands.

### ALL IN ONE

Blood bank application, start with your Loreena. Thanks to the RX 750 and the oval studied buckets, you can centrifuge 8 blood bags of 450 mL. A perfect separation of plasma, buffy coat and red cells.



Centrifuge	Description
<b>AFI-C300R-E-BB</b>	LOREENA Centrifuge Blood Bank
<b>AFI-C300RF-E-BB</b>	LOREENA Centrifuge Floor Model Blood Bank
Specifications	Swing-out rotor
Max Speed	4600rpm
Max RCF	4637g
Max Loading	4x950ml
T° Range	-10°C/+40°C
Dim. (HxWxD)	35x77x64cm (Floor Model 83x57x68cm)
Pack dim.	54x80x78cm (Floor Model 100x74x78cm)
Weight	145kg (Floor Model 170kg)





# AFI-BO750

## Blood Bank Application

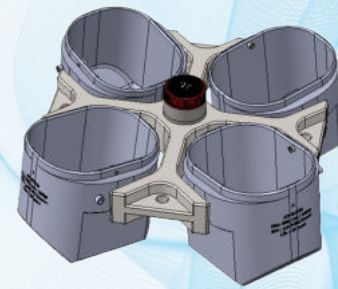
Model	R
Max Capacity	4 x 750ml
Angle	90°
RPM Max	4 600
ACR Max	4 637

### Accessories



Ref.	AFI-RX750	AFI-BO750*	AFI-WLI750	AFI-STICK7	AFI-STICK14
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\* Set of 4, possibility set of 2



Blood Bags	250-400 mL	450mL +/- 10% 475 mL +/-10%	350-450 mL
Type	Double/ Triple Cord Blood/ Buffy coat	Double / Triple Quadruple + Filtre	Simple Buffy coat
Bags per adapter / rotor	1 4	1 4	2 8
Adapter			
Hole LWH (mm)			
Radius	196	193	193
Max Charge (gr)	1500		
Ref.	AFI-LI750	AFI-LI750-600	AFI-LI750-900

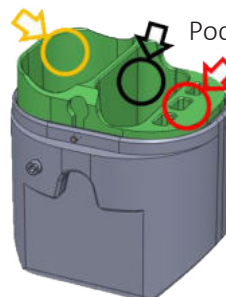
\* We recommend the use of a silicone spacer to wedge the pocket

Tubes	1,6-7	2,6-4,9	2,7-5	15	50
Capacity (ml)					
∅ x L (mm)	13x75 100	13x81 106	11x82 108	17x120	29x115
Tubes per adapter / rotor		34 136		16 64	7 28
Adapter					
Hole ∅ x L (mm)		13,5x58		18x80	30x70
Radius	196	176		196	196
Max Charge (gr)	1500				
Ref.		AFI-3TO5		AFI-3TO15C	AFI-3TO50C

### REINFORCED SECURITY

Blood Bags loading in a dedicated compartment to avoid any risk of perforation

Poche de sang Poches satellites  
Batons d'équilibrage



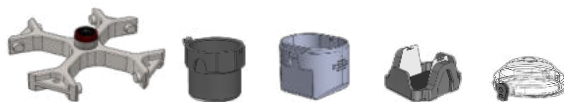
# AFI-RX750

## Adapters selection guide



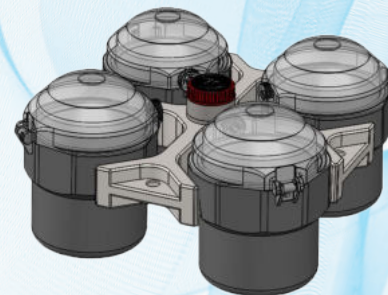
Model	V	R
Max Capacity	4 x 750ml	
Angle	90°	
RPM Max	4 500	4 600
ACR Max	4 528	4 731

### Accessories



Ref.	AFI-RX750	AFI-B750*	AFI-BO750*	AFI-BXDW3	AFI-L750*
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\* Set of 4, possibility set of 2



### Tubes

Capacity (ml)	1,1-1,4	1,5-2	1,5-2	1,3	1,6-7	2,6-4,9	1,2-3	4-8,5	7-10	10	15	15
∅ x L (mm)	8x82	11x38	12,5x40	10x45	13x75   100	13x81   106	11x82	15x91   108	16x100	21x90	17x120	17x120
Tubes per adapter / rotor	33   132	56   224	33   132	40   160	27   108		37   148	21   84		13   52	14   56	16   64

### Adapter

Hole ∅ x L (mm)	9x50	11,25x40	13x30	11x40	13,5x58	12,5x55	17x58	22x80	18x80	18x80
Radius	200	140/195	180	190	198	195	198	200	198	198
Max Charge (gr)	1000									

Ref.	AFI-3T1	AFI-3T2	AFI-3T2CRYO	AFI-3T1.3	AFI-3T5*	AFI-3T5ST*	AFI-3T10	AFI-3T10C	AFI-3T15C	AFI-3T15ST
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\* For tube length > 80mm and ACR > 3000g, we preconise using adapter AFI-3T6 or AFI-3T6ST

### Tubes

Capacity (ml)	30	30	30	50	50	50	50	50	50	80	80   100	150   200
∅ x L (mm)	25x110	25x110	25x95	29x115	29x115	29x115	29x115	29x115	29x107	38x110	44x100   127	61x118   138
Tubes per adapter / rotor	7   28	5   20	7   28	7   28	6   24	6   24	7   28	6   24	7   28	4   16	2   8	1   4

### Adapter

Hole ∅ x L (mm)	26x60	26x60	26,5x70	30x70	30x70	30x70	30x70	30x70	30x70	40x78	46x80	62x80
Radius	200	195	198	198	198	198	198	185/200	198	198	198	182
Max Charge (gr)	1000											

Ref.	AFI-3T30S	AFI-3T30C	AFI-3T30AOR	AFI-3T50S	AFI-3T50SL	AFI-3T50CSL*	AFI-3T50C	AFI-3T50CL	AFI-3T50AOR	AFI-3T80AOR	AFI-3T100R	AFI-3T200CF
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\* For protocols < 3500g

### Tubes

Capacity (ml)	200	200	200	250	250	250	290	500	500	625	750	750
∅ x L (mm)	56x118	60x130	56x112	60x163	65x115	62x122	62x137	96x148	98x114	92x130	98x152	100x130
Tubes per adapter / rotor	1   4	1   4	1   4	1   4	1   4	1   4		1   4	1   4	1   4	1   4	1   4




### Adapter

Hole ∅ x L (mm)	58x80	62x80	58x80	62x103	66x103	64x80	97x103	102x102	94x85	102x102	102x102
Radius	200	200	198	198	198	182	200	200	184	200	200
Max Charge (gr)	1000										

Ref.	AFI-3T200C	AFI-3T200CN	AFI-3T200F	AFI-3T250C	AFI-3T250G	AFI-3T290F	AFI-3T500C	-	AFI-3T625F	-	-
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Spécifications - Specifications				
Modèle - Model	Réfrigéré - Refrigerated		Réfrigéré de sol Refrigerated Floor version	
Centrifugeuses de paille et de sol <i>Benchtop &amp; Floor centrifuges</i>				
Référence - Reference	AFI-C300R-E-BB	AFI-C300R-BB	AFI-C300RF-EBB	AFI-C300RF-BB
Caractéristiques électriques - Electrical specifications				
Tension nominale - Nominal voltage (+/- 10%)	230 V	120 V	230 V	120 V
Fréquence - Frequency	50 Hz	60 Hz	50 Hz	60 Hz
Puissance alimentation max. - Power max.	1700 W (800W compressor)		1700 W (800W compressor)	
Conformité aux directives Européennes - Compliance with European directives				
98/79/CE : Dispositifs médicaux de diagnostic in vitro <i>In vitro diagnostic medical devices</i>	✓		✓	
2014/35/UE : Directive Basse Tension – Low Voltage Directive	✓		✓	
2014/30/UE : Directive CEM - EMC directive	✓		✓	
2012/19/CE : Directive DEEE - WEEE directive	✓		✓	
2011/65/CE : Directive ROHS - ROHS Directive	✓		✓	
IEC / EN61010-1 (2010) : Sécurité - Safety	✓		✓	
IEC / EN61010-2-020 (2006) : Sécurité - Safety	✓		✓	
IEC / EN61010-2-101 (2015) : Sécurité - Safety	✓		✓	
EN61326-1(2013) : Compatib. électromagn.- EMC compatibility	✓		✓	
EN55011 2009/A1 (2010) Classe A : Perturbations / Emissions	✓		✓	
EN ISO 14971 (2012) : Gestion des risques - Risk management	✓		✓	
ISO 9001 (2015) : Gestion des risques - Risk management	✓		✓	
ISO 13485 (2016): Gestion des risques - Risk management	✓		✓	
Caractéristiques principales (voir brochure) - Main specifications (see brochure for full specification)				
 <b>Rotors Swing-out</b> <i>Swing-out rotors</i>	Capacité max. <i>Max. capacity</i>	AFI-RX750 AFI-BO750	4x 750mL	
	RPM max.		4600 rpm	4600 rpm
	ACR max <i>Max. RCF</i>		4637 g	4637 g
Couvercle - Lid	✓			
Dimensions & poids - Dimensions & Weight				
Dimensions (HxLxL) - Foot print Dimensions (HxWxD)	35 x 77 x 64 cm		83 x 57 x 68 cm	
Profondeur table – Table deep	60 cm		/	
Dimensions emballage (HxLxL) - Package dimension (HxWxD)	54 x 80 x 78 cm		100 x 74 x 78 cm	
Hauteur couvercle ouvert - Opened lid height	88 cm		139 cm	
Poids net - Weight unpacked	145 kg		170 kg	
Poids emballé - Weight packed	160 kg		185 kg	

Description de la centrifugeuse / Centrifuge description				
Référence - Reference	AFI-C300R-E-BB	AFI-C300R-BB	AFI-C300RF-EBB	AFI-C300RF-BB
Ecran graphique tactile 4.3", couleur <i>4.3" graphic color screen</i>		✓		
Commandes <i>Commands</i>		Touches et écran tactile <i>Buttons and touchscreen</i>		
Contrôle par microprocesseur <i>Microprocessor control</i>		✓		
Fixation de rotor sans outil / <i>Toolless rotor fixing</i>		Système "ClickSpin®"		
Reconnaissance automatique du rotor <i>Automatic rotor recognition</i>		✓		
Détection de balourd <i>Imbalance detection</i>		Calibration ajustable (15g swing out et 3g rotors angulaires). Neutralisation automatique des vibrations liées à l'environnement. <i>Tunable calibration (15g for swing out &amp; 3g for angular rotors). Automatic neutralization of vibrations due to environment</i>		
Mode économie d'énergie <i>Energy saving mode</i>			Mode "Postcool" désactivable <i>Desactivable "Postcool" mode</i>	
Fermeture motorisée du couvercle / <i>Motorized lid closing</i>		✓		
Fonction My IDEM (calcul d'intégral) <i>My IDEM function (Accumulated Centrifugal Effect)</i>		✓		
Durées de cycle <i>Cycle duration</i>		10 s à 99h:59min:59s & Impulsion <i>10 s to 99h:59min:59 s &amp; Pulse</i>		
Unités de température <i>Temperature units</i>		°C / °F		
Chambre de centrifugation <i>Centrifugation chamber</i>		Inox		
Densité max. <i>Max. density</i>		1.2 g / cm <sup>3</sup>		
Moteur à induction sans charbon <i>Brushless induction motor</i>		✓		
Vitesse mini / Maxi <i>Mini / Max Speed</i>		300 / 4600 rpm		
Pas de réglage de la vitesse <i>Speed setting step</i>		10 rpm		
Précision de vitesse <i>Speed accuracy</i>		± 0.5%		
Nombre de programmes <i>Programs number</i>		99+2		
Fonction Pulse <i>Pulse (short run)</i>		✓		
Pentes d'accélération & de freinage <i>Acceleration &amp; Braking slopes</i>		10 & 10		
Décélération libre <i>Brakeless mode</i>		✓		
Système de réfrigération <i>Cooling system</i>		Sans CFC <i>CFC free</i>		
Plage de réglage en température <i>Range of setting temperature</i>		-10°C → +40°C		
Fonction de pré-refroidissement <i>Precool function</i>		✓		
Précision en température <i>Temperature accuracy</i>		+/- 2°C		
Dissipation de chaleur maximale <i>Heat dissipation</i>		5801 BTU/h		
Niveau sonore max. <i>Max. noise</i>		≤ 60 dB (A)	≤ 57 dB (A)	
Option Thermostatée 37°C		37°C +/-2°C		



# LOREENA

*From Experience comes Excellence*



**VETERINARY**

Centrifuge



# LOREENA

## Veterinary Centrifuge

### Veterinary Centrifuge

LOREENA VT has been designed to meet the intense analysis periods of veterinary laboratories.

Its dedicated accessory and its automatic tube uncapping system during centrifugation offer an undeniable time saving to laboratories during the prophylaxis period for example.

96 tubes can be centrifuged and uncapped at the same time before being transferred to the automatic machines.

#### QUALITY THAT SPEAK FOR ITSELF

The «IDEM» application coupled with PFC (Power Factor Control) technology ensures a reproducibility of your cycles making LOREENA an ideal centrifuge for simplified blood processing productivity

#### INTERACTIVE COMMUNICATION

With its large «Smartphone» touch screen colour display, LOREENA ensures interactive communication between you and the machine. Backlit display for better visibility Programming is greatly facilitated by direct access to all cycle parameters in a single window. Compatible with gloved hands.



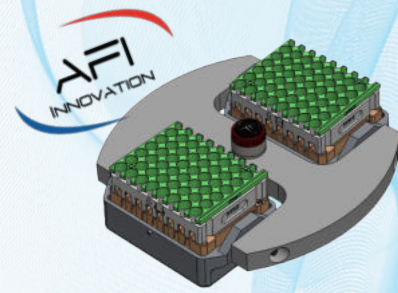
Centrifuge	Description
<b>AFI-C300R-E-VT</b>	LOREENA Centrifuge Veterinary
<b>AFI-C300RF-E-VT</b>	LOREENA Centrifuge Floor Model Veterinary
Specifications	Swing-out rotor
Max Speed	4600rpm
Max RCF	4637g
Max Loading	4x1000ml
T° Range	-10°C/+40°C
Dim. (HxWxD)	35x77x64cm (Floor Model 83x57x68cm)
Pack dim.	54x80x78cm (Floor Model 100x74x78cm)
Weight	145kg (Floor Model 170kg)







**ANIMAL PROPHYLAXIS : 96 tubes automatically uncaped**



Model	V	R
Max Capacity	96 tubes	
Angle	90°	
RPM Max	3 700	3 700
ACR Max	2 510	2 510

**Tubes**

				LONG CAP	SHORT CAP	INSIDE CAP		
Capacity (ml)	-	-	1,6-5	-	-	-	-	-
Ø x L (mm)	-	-	13x75	-	-	-	-	-
Tubes per adapter / rotor	-	-	49 96	-	-	-	-	-

**Accessories**

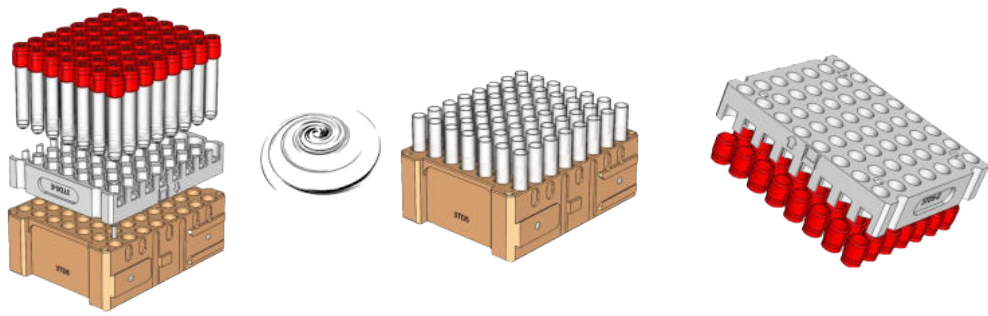


Hole Ø x L(mm)	-	-	-	-	-	-	-	-
Radius	-	164	160	-	-	-	-	-
Max Charge (gr)	-	1900		-	-	-	-	-
Ref.	AFI-RHD3	AFI-BHD3	AFI-3TD5*	AFI-3TD5-O	AFI-3TD5-E	AFI-3TD5-ES	AFI-3TD5-E + AFI-3TD5-P**	AFI-STICK10




\* Set of 2

\*\* Also possible AFI-3TD5-ES + AFI 3TD5-P

Tubes are automatically uncaped during centrifuge cycling. You can remove and trash all of them in same time.





Spécifications - Specifications				
Modèle - Model	Réfrigéré -Refrigerated		Réfrigéré de sol Refrigerated Floor version	
Centrifugeuses de paillasse et de sol <i>Benchtop &amp; Floor centrifuges</i>				
Référence - Reference	AFI-C300R-E-VT	AFI-C300R-VT	AFI-C300RF-E-VT	AFI-C300RF-VT
Caractéristiques électriques - Electrical specifications				
Tension nominale - Nominal voltage (+/- 10%)	230 V	120 V	230 V	120 V
Fréquence - Frequency	50 Hz	60 Hz	50 Hz	60 Hz
Puissance alimentation max. - Power max.	1700 W (800W compressor)		1700 W (800W compressor)	
Conformité aux directives Européennes - Compliance with European directives				
98/79/CE : Dispositifs médicaux de diagnostic in vitro <i>In vitro diagnostic medical devices</i>	✓		✓	
2014/35/UE : Directive Basse Tension – Low Voltage Directive	✓		✓	
2014/30/UE : Directive CEM - EMC directive	✓		✓	
2012/19/CE : Directive DEEE - WEEE directive	✓		✓	
2011/65/CE : Directive ROHS - ROHS Directive	✓		✓	
IEC / EN61010-1 (2010) : Sécurité - Safety	✓		✓	
IEC / EN61010-2-020 (2006) : Sécurité - Safety	✓		✓	
IEC / EN61010-2-101 (2015) : Sécurité - Safety	✓		✓	
EN61326-1(2013) : Compatib. électromagn.- EMC compatibility	✓		✓	
EN55011 2009/A1 (2010) Classe A : Perturbations / Emissions	✓		✓	
EN ISO 14971 (2012) : Gestion des risques - Risk management	✓		✓	
ISO 9001 (2015) : Gestion des risques - Risk management	✓		✓	
ISO 13485 (2016): Gestion des risques - Risk management	✓		✓	
Caractéristiques principales (voir brochure) - Main specifications (see brochure for full specification)				
	Capacité max. <i>Max. capacity</i>	96 tubes 5ml		
	RPM max.	AFI-RHD3 AFI-BHD3	4600 rpm	4600 rpm
	ACR max <i>Max. RCF</i>		3785 g	3785 g
Couvercle - Lid	✓			
Dimensions & poids - Dimensions & Weight				
Dimensions (HxLxL) - Foot print Dimensions (HxWxD)	35 x 77 x 64 cm		83 x 57 x 68 cm	
Profondeur table – Table deep	60 cm		/	
Dimensions emballage (HxLxL) - Package dimension (HxWxD)	54 x 80 x 78 cm		100 x 74 x 78 cm	
Hauteur couvercle ouvert - Opened lid height	88 cm		139 cm	
Poids net - Weight unpacked	145 kg		170 kg	
Poids emballé - Weight packed	160 kg		185 kg	



Description de la centrifugeuse / Centrifuge description				
Référence - Reference	AFI-C300R-E-BB	AFI-C300R-BB	AFI-C300RF-E-BB	AFI-C300RF-BB
Ecran graphique tactile 4.3", couleur <i>4.3" graphic color screen</i>			✓	
Commandes <i>Commands</i>		Touches et écran tactile <i>Buttons and touchscreen</i>		
Contrôle par microprocesseur <i>Microprocessor control</i>			✓	
Fixation de rotor sans outil / <i>Toolless rotor fixing</i>		Système "ClickSpin®"		
Reconnaissance automatique du rotor <i>Automatic rotor recognition</i>			✓	
Détection de balourd <i>Imbalance detection</i>		Calibration ajustable (15g swing out et 3g rotors angulaires). Neutralisation automatique des vibrations liées à l'environnement. <i>Tunable calibration (15g for swing out &amp; 3g for angular rotors). Automatic neutralization of vibrations due to environment</i>		
Mode économie d'énergie <i>Energy saving mode</i>			Mode "Postcool" désactivable <i>Desactivable "Postcool" mode</i>	
Fermeture motorisée du couvercle / <i>Motorized lid closing</i>			✓	
Fonction My IDEM (calcul d'intégral) <i>My IDEM function (Accumulated Centrifugal Effect)</i>			✓	
Durées de cycle <i>Cycle duration</i>		10 s à 99h:59min:59s & Impulsion <i>10 s to 99h:59min:59 s &amp; Pulse</i>		
Unités de température <i>Temperature units</i>			°C / °F	
Chambre de centrifugation <i>Centrifugation chamber</i>			Inox	
Densité max. <i>Max. density</i>			1.2 g / cm <sup>3</sup>	
Moteur à induction sans charbon <i>Brushless induction motor</i>			✓	
Vitesse mini / Maxi <i>Mini / Max Speed</i>			300 / 4600 rpm	
Pas de réglage de la vitesse <i>Speed setting step</i>			10 rpm	
Précision de vitesse <i>Speed accuracy</i>			± 0.5%	
Nombre de programmes <i>Programs number</i>			99+2	
Fonction Pulse <i>Pulse (short run)</i>			✓	
Pentes d'accélération & de freinage <i>Acceleration &amp; Braking slopes</i>			10 & 10	
Décélération libre <i>Brakeless mode</i>			✓	
Système de réfrigération <i>Cooling system</i>			Sans CFC <i>CFC free</i>	
Plage de réglage en température <i>Range of setting temperature</i>			-10°C → +40°C	
Fonction de pré-refroidissement <i>Precool function</i>			✓	
Précision en température <i>Temperature accuracy</i>			+/- 2°C	
Dissipation de chaleur maximale <i>Heat dissipation</i>			5801 BTU/h	
Niveau sonore max. <i>Max. noise</i>		≤ 60 dB (A)		≤ 57 dB (A)
Option Thermostatée 37°C			37°C +/-2°C	

AUTOKLAVEN | SICHERHEITSWERKBÄNKE | CO2-INKUBATOREN | ZENTRIFUGEN  
ULTRATIEFKÜHLSCHRÄNKE | REINSTWASSERSYSTEME | TIERKÄFIGWECHSELSTATIONEN  
ABWASSERSTERILISATION | SPÜLMASCHINEN | SERVICE, WARTUNG, VALIDIERUNG



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