



HL-4¹
 Bronze Body
 4-Place, 150 ml
 Swinging-Bucket
 Rotor Mass: 1.5 kg

For use in GLC-2B¹ and GLC-3¹
 centrifuges

SYSTEM	CENTRIFUGE	MAX. SPEED (rpm)	MAX. RCF (g)	MAX. RADIUS (cm)	MAX. TUBE SIZE (mm)
HL-4 with 100 ml Open Buckets	GLC-2B	2,600	1,543	20.43	45 × 150
	GLC-3	3,400	2,638		
HL-4 with 50 ml Sealed-Buckets	GLC-2B	3,000	1,763	17.54	30 × 115
	GLC-3	3,400	2,265		
HL-4 with Omnicarrier	GLC-2B	2,800	1,435	16.39	33 × 120
	GLC-3	3,200	1,875		

Catalog No. 11004

Includes:
 HL-4 Rotor Body
 Instruction Manual **11019**
Does not include Buckets or Omnicarriers. Please order separately.

Systems³



00636
 100 ml Bucket



00515
 Trunnion Ring

100 ml Open Bucket System



00598
 Omnicarrier



00648



00565



00563
 Inserts



00564



00575

Omnicarrier System

A common carrier with a choice of six inserts for 1 ml to 50 ml tubes.



00624
 50 ml Sealed-Bucket²



00627
 2-Place Trunnion Ring



00629
 1-Place Trunnion Ring Adapter



00515
 1-Place Trunnion Ring

50 ml Sealed-Bucket² System

(continued on next page)

⁽¹⁾Instrument/rotor no longer available.

⁽²⁾This Sealed-Bucket system has been tested for microbiological containment (Ref. 1) by PHLS-CAMR, Porton Down. Suitable for use with materials up to ACDP Category 3 (Ref. 2). Seal integrity may be affected by improper use or maintenance.

⁽³⁾No longer available.

HL-4 ROTOR (continued)

Omnicarrier System

The Omnicarrier System consists of a common carrier and a choice of six stainless steel inserts that can hold from 1 ml to 50 ml Tubes. These inserts can also serve as tube racks before and after centrifugation.

Required Accessories:

Omnicarrier for Multiplace Inserts, Stainless Steel, (1/pkg). **00598**

Multiplace Inserts, Stainless Steel:

REFER TO TUBES AND BOTTLES CHART FOR CORRECT INSERT FOR YOUR TUBE OR BOTTLE (One insert required for each carrier. Identical inserts must be run opposite each other.)

Optional Accessories/Replacement Parts:

Booster Block for Tubes Less Than 70 mm in Height (fits in bottom of insert), (4/pkg) **03252**

Retaining Pad for RIA Decanting, Fits 10 × 75 mm Tubes (12/pkg) **01060**

Retaining Pad for RIA Decanting, Fits 12 × 75 mm Tubes (10/pkg) **01059**

Pad for 6-place Insert (1/pkg), Replacement **00345**

Pad for 10, 12, 20 and 40-place Inserts (1/pkg), Replacement **00344**

00598



TUBES, BOTTLES

CAPACITY (ml)		DESCRIPTION	MAX SPEED (rpm)	DIMENSIONS (mm)	TUBE CAT. NO. (Qty/Pkg)	SEALING ASSEMBLY*		INSERT REQ'D		NOTES
NOMINAL	FILL					CAT. NO. (Qty/Pkg)	DESCRIPTION	CAT. NO. (Qty/Pkg)	NO. OF PLACES	
—	—	BioVials®, OmniVials®	—	—	—	—	—	00563 (1)	10	Requires Booster Block 03252 (4/pkg).
—	—	Chlamydia Vials	—	15 × 45	—	—	—	00563 (1)	10	Requires Booster Block 03252 (4/pkg).
50	46	Polypropylene Flanged Tube	3,400	29 × 102	03147 (25)	03268 (25)	Polypropylene, Snap-on	00648 (1)	2	
50	48	Polycarbonate Flanged Tube	3,400	29 × 102	03146 (25)	03268 (25)	Polypropylene, Snap-on	00648 (1)	2	
50	41	Polypropylene Oak Ridge Bottle	3,400	28 × 103	03530 (25)	03535 (25)	Polypropylene, Sealing	00648 (1)	2	Nonsealing Cap 03926 (25/pkg).
50	38	Polycarbonate Oak Ridge Bottle	3,400	28 × 103	03480 (25)	03535 (25)	Polypropylene, Sealing	00648 (1)	2	Nonsealing Cap 03926 (25/pkg).
50	—	Tissue Culture Tube, Conical	—	30 × 115	—	—	—	00648 (1)	2	
35	—	Polyallomer Nalgene® Conical Oak Ridge Tube	—	29 × 105	—	—	—	00648 (1)	1	
35	—	Polycarbonate Nalgene® Conical Oak Ridge Tube	—	29 × 105	—	—	—	00648 (1)	1	
16	16	Polypropylene Flanged Tube	3,400	18 × 100	03244 (50)	03299 (50)	Polypropylene, Snap-on	00565 (1)	6	
16	17	Polycarbonate Flanged Tube	3,400	18 × 100	03243 (50)	03269 (50)	Polypropylene, Snap-on	00565 (1)	6	
15	—	Vacutainer® Tube	—	16 × 127	—	—	—	00563 (1)	10	Maximum number tubes per carrier is six to allow proper swing clearance.
15	18	Corex® Tube	3,400	18 × 102	03286 (25)	—	—	00565 (1)	6	
15	—	Tissue Culture Tube, Conical	—	17 × 120	—	—	—	00565 (1)	6	
15	—	Urinalysis Tube, Conical	—	17 × 120	—	—	—	00565 (1)	6	
10-16	—	Standard Tube	—	13 × 100 to 18 × 120	—	—	—	00565 (1)	6	
14	16	Pyrex® Tube	3,400	18 × 120	03111 (50)	—	—	00565 (1)	6	

*Sealing assembly parts may be available. See section E for availability.

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TUBES, BOTTLES FOR HL-4 OMNICARRIER SYSTEM (continued)

CAPACITY (ml)		DESCRIPTION	MAX SPEED (rpm)	DIMENSIONS (mm)	TUBE CAT. NO. (Qty/Pkg)	SEALING ASSEMBLY*		INSERT REQ'D		NOTES
NOMINAL	FILL					CAT. NO. (Qty/Pkg)	DESCRIPTION	CAT. NO. (Qty/Pkg)	NO. OF PLACES	
14	12	Polypropylene Flanged Tube	3,400	18 × 75	03247 (50)	03269 (50)	Polypropylene, Snap-on	00565 (1)	6	
14	12	Polycarbonate Flanged Tube	3,400	18 × 75	03246 (50)	03269 (50)	Polypropylene, Snap-on	00565 (1)	6	
12	14	Pyrex® Tube	3,400	18 × 102	03109 (50)	—	—	00565 (1)	6	
12	12	Polypropylene Flanged Tube	3,400	16 × 100	03116 (50)	03266 (50)	Polypropylene, Snap-on	00563 (1)	10	
12	12	Polycarbonate Flanged Tube	3,400	16 × 100	03115 (50)	03266 (50)	Polypropylene, Snap-on	00563 (1)	10	
12	—	Standard Tube	—	10 × 75 to 16 × 100	—	—	—	00563 (1)	10	
10	—	Pyrex® Graduated Tube, Conical	—	18 × 100	—	—	—	00565 (1)	6	
10	9.1	Polypropylene Oak Ridge Bottle	3,400	16 × 83	03929 (50)	03279 (25)	Polypropylene, Sealing	00563 (1)	10	Nonsealing Cap 03924 (25/pkg) available.
10	9.7	Polycarbonate Oak Ridge Bottle	3,400	16 × 83	03020 (25)	03279 (25)	Polypropylene, Sealing	00563 (1)	10	Nonsealing Cap 03924 (25/pkg) available.
10	—	Vacutainer® Tube	—	16 × 100	—	—	—	00563 (1)	10	
10	—	Pyrex® Tube	—	13 × 100	—	—	—	00564 (1)	12	
7-10	—	Standard Tube	—	10 × 75 to 13 × 100	—	—	—	00564 (1)	12	
7	—	Vacutainer® Tube	—	13 × 100	—	—	—	00564 (1)	12	
7	7	Polycarbonate Flanged Tube	3,400	13 × 100	03120 (50)	03265 (50)	Polypropylene, Snap-on	00564 (1)	12	
7	7	Polypropylene Flanged Tube	3,400	13 × 100	03121 (50)	03265 (50)	Polypropylene, Snap-on	00564 (1)	12	
5	—	Vacutainer® Tube	—	13 × 75	—	—	—	00564 (1)	12	
5	—	Vacutainer® Tube	—	10.25 × 103	—	—	—	00575 (1)	20	
3-5	—	Standard Tube	—	10 × 75 to 12 × 75	—	—	—	00575 (1)	20	Retainer Pads available for RIA decanting: 01060 for 10 × 75 tubes; 01059 for 12 × 75 tubes.
5	6	Pyrex® Tube	3,400	12 × 75	03102 (50)	—	—	00575 (1)	20	Retainer Pads 01059 (10/pkg) available for RIA decanting.
4	—	Vacutainer® Tube	—	10.25 × 84	—	—	—	00575 (1)	20	
4	4	Polypropylene Flanged Tube	3,400	11 × 75	03105 (50)	03264 (50)	Polypropylene, Snap-on	00575 (1)	20	
4	4	Polycarbonate Flanged Tube	3,400	11 × 75	03104 (50)	03264 (50)	Polypropylene, Snap-on	00575 (1)	20	
3	—	Vacutainer® Tube	—	10.25 × 64	—	—	—	00575 (1)	20	
3	3	Pyrex® Tube	3,400	10 × 75	03100 (50)	—	—	00575 (1)	20	Retainer Pads 01060 (12/pkg) available for RIA decanting.
2	—	Vacutainer® Tube	—	10.25 × 47	—	—	—	00575 (1)	20	Requires Booster Block 03252 (4/pkg).
1.5	—	Microtube	—	—	—	—	—	00575 (1)	20	

*Sealing assembly parts may be available. See section E for availability.

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HL-4 ROTOR (continued)

50 ml Sealed-Bucket System¹

2-Place Trunnion Ring Allows 8 Bucket Load in HL-4 Rotor
 1-Place Trunnion Ring Allows 4 Bucket Load in HL-4 Rotor

Required Accessories:

Sealed-Bucket Assembly, Stainless Steel, 50 ml, **00624**
 Trunnion Ring, 2-Place Cat. No. **00627**, for 50 ml Sealed-Bucket Cat. No. **00624**. OR
 Adapter Cat. No. **00629** for 1-Place Trunnion Ring Cat. No. **00515**. Trunnion Ring, 1-Place Cat. No. **00515**, requires Adapter Cat. No. **00629**.



00624



00627



00629



00515

Replacement Parts:

Sealing Cap Cat. No. **00626** with O-ring for Sealed-Bucket Cat. No. **00624**.
 O-rings Cat. No. **61395** for Sealing Cap Cat. No. **00626**, Replacement.

TUBES, BOTTLES

CAPACITY (ml)		DESCRIPTION	MAX SPEED (rpm)	DIMENSIONS (mm)	TUBE CAT. NO. (Qty/Pkg)	SEALING ASSEMBLY*		ADAPTER REQ'D		NOTES
NOMINAL	FILL					CAT. NO. (Qty/Pkg)	DESCRIPTION	CAT. NO. (Qty/Pkg)	NO. OF PLACES	
50	46	Polypropylene Flanged Tube	3,400	29 × 102	03147 (25)	03268 (25)	Polypropylene, Snap-on	00631 (1)	1	
50	48	Polycarbonate Flanged Tube	3,400	29 × 102	03146 (25)	03268 (25)	Polypropylene, Snap-on	00631 (1)	1	
50	56	Polyallomer Thin-Walled Tube	3,400	28 × 104	03139 (25)	—	—	00631 (1)	1	
50	41	Polypropylene Oak Ridge Bottle	3,400	28 × 103	03530 (25)	03535 (25)	Polypropylene, Sealing	00631 (1)	1	Nonsealing Cap 03926 (25/pkg).
50	38	Polycarbonate Oak Ridge Bottle	3,400	28 × 103	03480 (25)	03535 (25)	Polypropylene, Sealing	00631 (1)	1	Nonsealing Cap 03926 (25/pkg).
50	50	Stainless Steel Flanged Tube	3,400	28 × 101	00517 (1)	00518 (1)	Stainless Steel, Sealing	00631 (1)	1	Requires Wrench 01014 for tube sealing.
50	50	Stainless Steel Tube	3,400	28 × 101	00579 (1)	00518 (1)	Stainless Steel, Sealing	00631 (1)	1	Requires Wrench 01014 for tube sealing.
50	—	Tissue Culture Tube, Conical	—	30 × 115	—	—	—	00630 (1)	1	

100 ml Open Bucket System

Allows 4 Bucket Load in HL-4 Rotor

Required Accessories:

Bucket, Stainless Steel, 100 ml Cat. No. **00636**, with Rubber Pad Cat. No. **00343**.
 Trunnion Ring, 1-Place Cat. No. **00515**, for 100 ml Bucket Cat. No. **00636**.



00636



00515

TUBES, BOTTLES

CAPACITY (ml)		DESCRIPTION	MAX SPEED (rpm)	DIMENSIONS (mm)	TUBE CAT. NO. (Qty/Pkg)	SEALING ASSEMBLY*		ADAPTER REQ'D		NOTES
NOMINAL	FILL					CAT. NO. (Qty/Pkg)	DESCRIPTION	CAT. NO. (Qty/Pkg)	NO. OF PLACES	
150	168	Polycarbonate Tube	3,400	45 × 132	03143 (25)	—	—	—	—	
100	134	Pyrex® Bottle	3,000	44 × 137	03230 (1)	Included with Bottle	Polypropylene, Nonsealing	00343 (1)	1	Adapter 00343 is included with purchase of 100 ml Bucket 00636 .
35	—	Polyallomer Nalgene® Conical Oak Ridge Tube	—	29 × 105	—	—	—	—	1	
35	—	Polycarbonate Nalgene® Conical Oak Ridge Tube	—	29 × 105	—	—	—	—	1	
14	16	Pyrex® Tube	3,400	18 × 120	03111 (50)	—	—	00386 (1)	3	

⁽¹⁾This bucket/cover assembly has been tested for microbiological containment (Ref. 1) by PHLS-CAMR, Porton Down. Suitable for use with materials up to ACDP category 3 (Ref. 2). Seal integrity may be affected by improper use or maintenance.

*Sealing assembly parts may be available. See section E for availability.

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TUBES, BOTTLES for HL-4 50 ml Open Bucket System

CAPACITY (ml)		DESCRIPTION	MAX SPEED (rpm)	DIMENSIONS (mm)	TUBE CAT. NO. (Qty/Pkg)	SEALING ASSEMBLY*		ADAPTER REQ'D		NOTES
NOMINAL	FILL					CAT. NO. (Qty/Pkg)	DESCRIPTION	CAT. NO. (Qty/Pkg)	NO. OF PLACES	
50	46	Polypropylene Flanged Tube	3,400	29 × 102	03147 (25)	03268 (25)	Polypropylene, Snap-on	—	—	
50	48	Polycarbonate Flanged Tube	3,400	29 × 102	03146 (25)	03268 (25)	Polypropylene, Snap-on	—	—	
50	56	Polyallomer Thin-Walled Tube	3,400	28 × 104	03139 (25)	—	—	—	—	
50	41	Polypropylene Oak Ridge Bottle	3,400	28 × 103	03530 (25)	03535 (25)	Polypropylene, Sealing	—	—	Nonsealing Cap 03926 (25/pkg) available.
50	38	Polycarbonate Oak Ridge Bottle	3,400	28 × 103	03480 (25)	03535 (25)	Polypropylene, Sealing	—	—	Nonsealing Cap 03926 (25/pkg) available.
50	50	Stainless Steel Flanged Tube	3,400	28 × 101	00517 (1)	00518 (1)	Stainless Steel, Sealing	—	—	Requires Wrench 01014 for tube sealing.
50	50	Stainless Steel Tube	3,400	28 × 101	00579 (1)	00518 (1)	Stainless Steel, Sealing	—	—	Requires Wrench 01014 for tube sealing.
35	—	Polyallomer Nalgene® Conical Oak Ridge Tube	—	29 × 105	—	—	—	See Notes	1	Requires Nalgene® adapter 3147-0050 .
35	—	Polycarbonate Nalgene® Conical Oak Ridge Tube	—	29 × 105	—	—	—	See Notes	1	Requires Nalgene® adapter 3147-0050 .
30	28	Polycarbonate Oak Ridge Bottle	3,400	25 × 94	03719 (25)	03276 (25)	Polypropylene, Sealing	00419 (1)	1	Nonsealing Cap 03925 (25/pkg) available.
30	28	Polypropylene Oak Ridge Bottle	3,400	25 × 94	03718 (25)	03276 (25)	Polypropylene, Sealing	00419 (1)	1	Nonsealing Cap 03925 (25/pkg) available.
30	32	Corex® Tube	3,400	24 × 105	03163 (10)	—	—	00368 (1)	1	
16	16	Polypropylene Flanged Tube	3,400	18 × 100	03244 (50)	03299 (50)	Polypropylene, Snap-on	00382 (1)	1	
16	17	Polycarbonate Flanged Tube	3,400	18 × 100	03243 (50)	03269 (50)	Polypropylene, Snap-on	00382 (1)	1	
15	18	Corex® Tube	3,400	18 × 102	03286 (25)	—	—	00363 (1)	1	
15	—	Urinalysis Tube, Conical	—	17 × 120	—	—	—	00363 (1)	1	
15	—	Tissue Culture Tube, Conical	—	17 × 120	—	—	—	00363 (1)	1	
12	14	Pyrex® Tube	3,400	18 × 102	03109 (50)	—	—	00363 (1)	1	
12	12	Polypropylene Flanged Tube	3,400	16 × 100	03116 (50)	03266 (50)	Polypropylene, Snap-on	00402 (1)	1	
12	12	Polycarbonate Flanged Tube	3,400	16 × 100	03115 (50)	03266 (50)	Polypropylene, Snap-on	00402 (1)	1	
10	—	Pyrex® Graduated Tube, Conical	—	18 × 100	—	—	—	00367 (1)	1	
10	9.1	Polypropylene Oak Ridge Bottle	3,400	16 × 83	03929 (50)	03279 (25)	Polypropylene, Sealing	00425 (1)	1	Nonsealing Cap 03924 (25/pkg) available.
10	9.7	Polycarbonate Oak Ridge Bottle	3,400	16 × 83	03020 (25)	03279 (25)	Polypropylene, Sealing	00425 (1)	1	Nonsealing Cap 03924 (25/pkg) available.
10	11	Polyallomer Thin-Walled Flanged Tube	3,400	13 × 100	03124 (50)	—	—	00473 (1)	1	
10	—	Pyrex® Tube	—	13 × 100	—	—	—	00366 (1)	1	
7	7	Polycarbonate Flanged Tube	3,400	13 × 100	03120 (50)	03265 (50)	Polypropylene, Snap-on	00473 (1)	1	

*Sealing assembly parts may be available. See section E for availability.

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TUBES, BOTTLES for HL-4 50 ml Open Bucket System (continued)

CAPACITY (ml)		DESCRIPTION	MAX SPEED (rpm)	DIMENSIONS (mm)	TUBE CAT. NO. (Qty/Pkg)	SEALING ASSEMBLY*		INSERT REQ'D		NOTES
NOMINAL	FILL					CAT. NO. (Qty/Pkg)	DESCRIPTION	CAT. NO. (Qty/Pkg)	NO. OF PLACES	
7	7	Polypropylene Flanged Tube	3,400	13 × 100	03121 (50)	03265 (50)	Polypropylene, Snap-on	00473 (1)	1	
4	4	Polypropylene Flanged Tube	3,400	11 × 75	03105 (50)	03264 (50)	Polypropylene, Snap-on	00381 (1)	2	
4	4	Polycarbonate Flanged Tube	3,400	11 × 75	03104 (50)	03264 (50)	Polypropylene, Snap-on	00381 (1)	2	
3	3	Pyrex® Tube	3,400	10 × 75	03100 (50)	—	—	00364 (1)	2	
2	2	Cellulose Acetate Butyrate Tube	3,400	7 × 75	03235 (50)	—	—	00410 (1)	4	
1.5	—	Microtube	—	—	—	—	—	00381 (1)	2	
1	1	Cellulose Acetate Butyrate Tube	3,400	7 × 50	03103 (50)	—	—	00408 (1)	4	

*Sealing assembly parts may be available. See section E for availability.

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