



# Golden Phoenix Liquid Nitrogen Container



Chengdu China



# COMPANY INTRODUCTION

Established in 1976, Chart Biomedical (Chengdu)Co., Ltd. (Former Chengdu Golden Phoenix Liquid Nitrogen Container Co., Ltd.) is a manufacturer and trader specializing in the research, development, and production of liquid nitrogen containers. The China Ministry of Agriculture invested in Chengdu Golden Phoenix Liquid Nitrogen Container Company, now a Chart Industries division.

As a result of our high-quality products and outstanding customer service in the past 30 years, Chart Biomedical has become a national technology leader, with a larger production and marketing scale and complete varieties. Since 1981, our products have won several State Quality Silver Awards and the honors of high-quality products from different grades of country, province, and city. Additionally, it was awarded as "Sichuan Famous Brand Product" seven times successively since 2002. "Golden Phoenix" has been entitled to be "Sichuan Famous Trademark" three times since 2008. With the continuous improvement of our marketing capability, our products are appreciated in different markets worldwide.

In 2001, GP began to sell products overseas and now has gained a global sales network reaching more than 60 countries.

In 2007, GP moved from Chengdu Phoenix Mountain to Pixian Chengdu Modern Industrial Park, further expanding our scale and capacity.

In 2009, GP became the only factory in China of the BioMedical Division of the world's leading cryogenic equipment manufacturer ---Chart Industries.

In 2011, a new high-end production line was used, bringing additional products and services.

Dedicated to achieving 100% Customer Satisfaction, we have acquired the authentication of ISO9001 and ISO13485 Quality Management System. We will continuously exceed ourselves and create value for customers, providing higher quality products and services!

# AWARDS



We acquired the authentication of ISO 13485 International Quality Management System in the same industry.



Ten products such as Winding Machine, Canister Divider, and Locking Cover all obtained the letter patent of utility model.

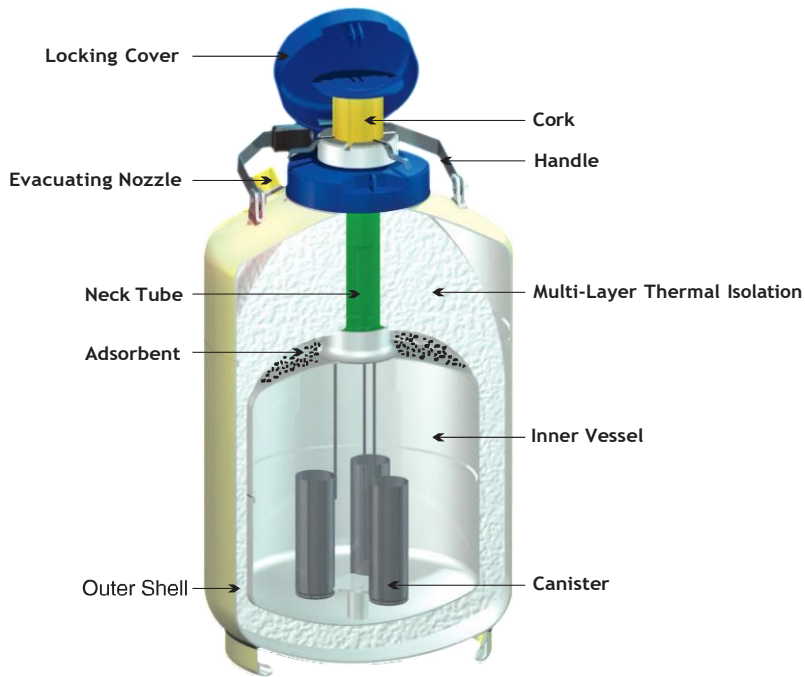


Since 2002, the Golden Phoenix liquid nitrogen container has been awarded the title of “Sichuan Famous Brand Product” seven times successively (awarded every other year).

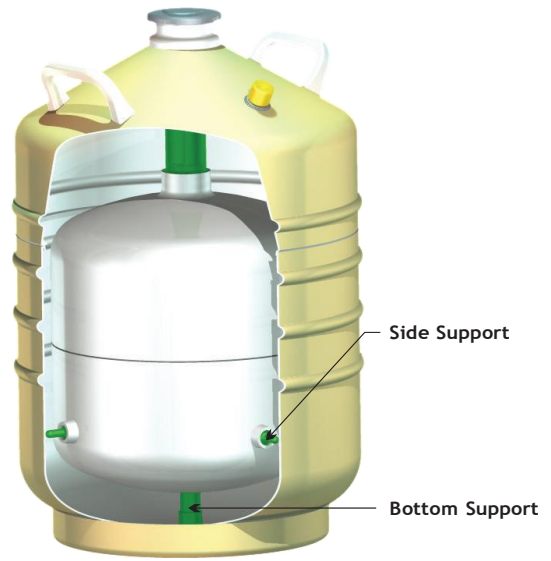


Since 2008, “Golden Phoenix” has been entitled to be “Sichuan Famous Trademark” thrice consecutively.

# PRODUCT STRUCTURE

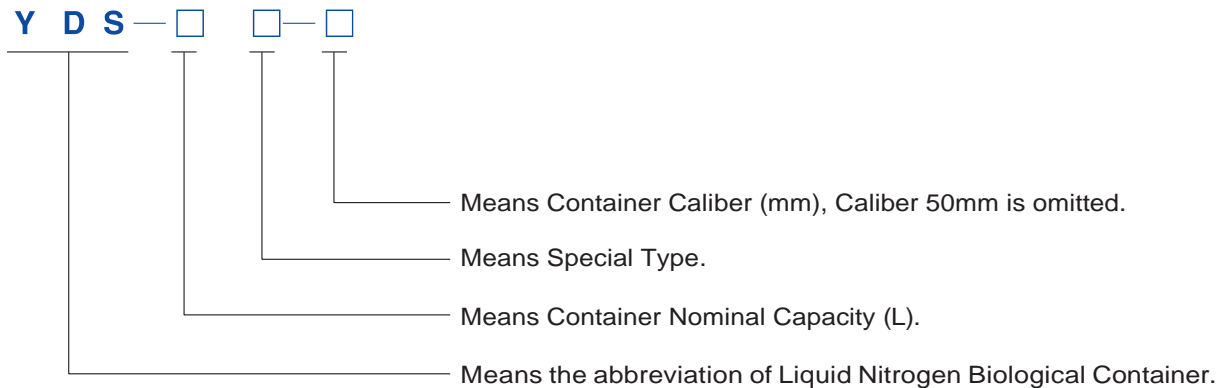


Storage Type



Transportation Type

## YDS CODING SYSTEM EXPLANATION



E.g.1: YDS-30 means liquid nitrogen biological container storing 30L nominal capacity with 50mm caliber.

E.g.2: YDS-50B-80 means liquid nitrogen biological container for transportation of 50L nominal capacity with 80mm caliber.

# FOR STORAGE



These small capacity containers are designed for transferring biological samples stored via manual work.

They are light, portable, and economical, with lower static evaporation loss.

## MAIN FEATURES:

- High-strength aluminum alloy structure, light empty weight
- Multi-layer thermal isolation design
- Hinged handle, portable
- Optional locking cover to protect stored biological samples
- Protective jacket to prevent collision, portable
- Two-year vacuum warranty

## Specifications



MODEL	UNIT	YDS-1-30	YDS-2-30	YDS-2-35	YDS-3	YDS-6	YDS-10	YDS-10-80	
PART NUMBER*	-	20005423	20005424	20005425	20005426	20005429	2005430	20005431	
CAPACITY	L	1.0	2.0	2.0	3.15	6.0	10.0	10.0	
EMPTY WEIGHT	kg	2.0	2.9	3.2	3.4	5.0	6.2	6.5	
NECK DIAMETER	mm	30	30	35	50	50	50	80	
OUTER DIAMETER	mm	180	224	195	224	287	303	303	
HEIGHT	mm	315	360	395	420	435	530	540	
STATIC EVAPORATION LOSS**	L/d	0.06	0.06	0.09	0.10	0.10	0.10	0.18	
STATIC HOLD TIME	d	16	32	23	31	63	101	57	
CANISTER OUTER DIAMETER	mm	26	19	25	38	38	38	63	
CANISTER HEIGHT	mm	120	120	120	120	120	120	120	
NUMBER OF CANISTERS	ea	1	3	3	6	6	6	6	
STRAW HOLDING CAPACITY (SINGLE LEVEL)	0.5ML	ea	60	90	180	792	792	792	2040
	0.25ML	ea	120	204	360	1788	1788	1780	4584
STRAW HOLDING CAPACITY (DOUBLE LAYER)	0.5ML	ea	-	-	-	-	-	-	-
	0.25ML	ea	-	-	-	-	-	-	-
OPTIONAL LOCKING COVER	ea	-	ü	ü	ü	ü	ü	ü	

\* Containers with the same PN may contain various configurations. Please confirm when ordering

\*\* Static evaporation loss and static hold time are normal. Actual rate and hold time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

## Accessories



Cork



Locking Cover



Canister

# FOR STORAGE

These moderate capacity containers are the best choice for customers who will store biological samples or liquid nitrogen for an extended period under a static environment.



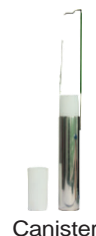
## Specifications

MODEL	UNIT	YDS-10A	YDS-10-90	YDS-12-90	YDS-13	YDS-15	YDS-16	
PART NUMBER*	-	20005434	20005432	200045859/15089984	20005435	20005429	2005437	
CAPACITY	L	10.0	10.0	12.0	13.0	16.0	17.0	
EMPTY WEIGHT	kg	6.5	6.8	9.0	7.0	8.2	8.5	
NECK DIAMETER	mm	50	90	90	50	50	50	
OUTER DIAMETER	mm	287	303	406	303	355	355	
HEIGHT	mm	605	538	470	600	600	620	
STATIC EVAPORATION LOSS**	L/d	0.09	0.18	0.26	0.10	0.10	0.10	
STATIC HOLD TIME	d	110	55	45	131	161	171	
CANISTER OUTER DIAMETER	mm	38	70	70/43	38	38	38	
CANISTER HEIGHT	mm	276	120	127	276	120	276	
NUMBER OF CANISTERS	ea	6	6	6/9	6	6	6	
STRAW HOLDING CAPACITY (SINGLE LEVEL)	0.5ML	ea	-	2588	2588/1566	-	792	-
	0.25ML	ea	-	6192	6192/3438	-	1788	-
STRAW HOLDING CAPACITY (DOUBLE LAYER)	0.5ML	ea	1284	-	-	1284	-	1284
	0.25ML	ea	2832	-	-	2832	-	2834
NUMBER OF CANES	ea	-	-	-	24	-	24	
NUMBERS OF VIALS	ea	-	-	-	120	-	120	
OPTIONAL LOCKING COVER	ea	ü	ü	ü	ü	ü	ü	

\* Containers with the same PN may contain various configurations. Please confirm when ordering

\*\* Static evaporation loss and static hold time are normal. Actual rate and hold time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

## Accessories





# FOR STORAGE



## MAIN FEATURES:

- High-strength aluminum alloy structure
- Multi-layer thermal isolation design
- Optional locking cover to protect stored biological samples
- Protective jacket to prevent collision
- Two-year vacuum warranty



## Specifications

MODEL	UNIT	YDS-20	YDS-30	YDS-30-80	YDS-30-90	YDS-30-125	
PART NUMBER*	-	20005440	20005442	20005443	20005444	20005445	
CAPACITY	L	20.0	31.5	31.5	31.5	31.5	
EMPTY WEIGHT	kg	11.2	12.9	13.5	13.6	14.2	
NECK DIAMETER	mm	50	50	80	90	125	
OUTER DIAMETER	mm	409	446	446	446	446	
HEIGHT	mm	650	670	680	680	685	
STATIC EVAPORATION LOSS**	L/d	0.10	0.11	0.18	0.18	0.28	
STATIC HOLD TIME	d	202	295	174	174	112	
CANISTER OUTER DIAMETER	mm	38	38	63	70	97	
CANISTER HEIGHT	mm	120/276	120/276	120/276	120/276	120/276	
NUMBER OF CANISTERS	ea	6	6	6/9	6	6	
STRAW HOLDING CAPACITY (SINGLE LEVEL)	0.5ML	ea	792	792	2244	2588	5124
	0.25ML	ea	1788	1788	5022	6192	11952
STRAW HOLDING CAPACITY (DOUBLE LAYER)	0.5ML	ea	1284	1284	3624	4920	9048
	0.25ML	ea	2832	2832	8460	10688	19944
NUMBER OF CANES	ea	24	24	72	90	198	
NUMBERS OF VIALS	ea	120	120	360	450	990	
OPTIONAL LOCKING COVER	ea	ü	ü	ü	ü	ü	

\* Containers with the same PN may contain various configurations. Please confirm when ordering

\*\* Static evaporation loss and static hold time are normal. Actual rate and hold time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

## Accessories



Level Measuring Scale



Level Monitor

# FOR STORAGE

These large-capacity containers feature longer hold time and are ideal for customers with high storage volume under a static environment.

## MAIN FEATURES:

- High-strength aluminum alloy structure
- Multi-layer thermal isolation design
- Optional locking cover to protect stored biological samples
- Protective jacket to prevent collision
- Two-year vacuum warranty



## Specifications

MODEL	UNIT	YDS-35	YDS-35-80	YDS-35-125	YDS-47*127	
PART NUMBER*	-	20005447	20005448	20005449	20005469	
CAPACITY	L	35.5	35.5	35.5	47.0	
EMPTY WEIGHT	kg	13.8	14.1	15.1	19.0	
NECK DIAMETER	mm	50	80	125	127	
OUTER DIAMETER	mm	473	473	473	500	
HEIGHT	mm	680	680	690	675	
STATIC EVAPORATION LOSS**	L/d	0.11	0.19	0.29	0.33	
STATIC HOLD TIME	d	333	187	123	142	
CANISTER OUTER DIAMETER	mm	38	63	97	103	
CANISTER HEIGHT	mm	120/276	120/276	120/276	120/276	
NUMBER OF CANISTERS	ea	6	6	6	6	
STRAW HOLDING CAPACITY (SINGLE LEVEL)	0.5ML	ea	792	2244	5124	6702
	0.25ML	ea	1788	5022	11952	14046
STRAW HOLDING CAPACITY (DOUBLE LAYER)	0.5ML	ea	1284	3624	9048	10704
	0.25ML	ea	2832	8460	19944	23604
NUMBER OF CANES	ea	24	72	198	204	
NUMBERS OF VIALS	ea	120	360	990	1020	
OPTIONAL LOCKING COVER	ea	ü	ü	ü	ü	

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\*\* Static evaporation loss and static hold time are normal. Actual rate and hold time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

## Accessories



Roller Base



Canister



# FOR TRANSPORTATION



This series is designed for sample transportation with special side or bottom reinforcements.

## MAIN FEATURES:

- High-strength aluminum alloy structure
- Multi-layer thermal isolation design
- Optional locking cover to protect stored biological samples
- Optional roller base to move the container easily
- Protective jacket to prevent collision
- Two-year vacuum warranty



## Specifications

MODEL	UNIT	YDS-30B	YDS-30B-80	YDS-35B	YDS-35B-80
PART NUMBER*	-	20005456	20005457	20005459	20005460
CAPACITY	L	31.5	31.5	35.5	35.5
EMPTY WEIGHT	kg	13.1	13.7	14.0	14.3
NECK DIAMETER	mm	50	80	50	80
OUTER DIAMETER	mm	446	446	473	473
HEIGHT	mm	675	680	680	680
STATIC EVAPORATION LOSS**	L/d	0.16	0.23	0.17	0.23
STATIC HOLD TIME	d	191	136	215	154
CANISTER OUTER DIAMETER	mm	38	63	38	63
CANISTER HEIGHT	mm	120/276	120/276	120/276	120/276
NUMBER OF CANISTERS	ea	6	6	6	6
STRAW HOLDING CAPACITY (SINGLE LEVEL)	0.5ML	792	2244	792	2244
	0.25ML	1788	5022	1788	5022
STRAW HOLDING CAPACITY (DOUBLE LAYER)	0.5ML	1284	3624	1284	3624
	0.25ML	2832	8460	2832	8460
NUMBER OF CANES	ea	24	72	24	72
NUMBERS OF VIALS	ea	120	360	120	360
OPTIONAL LOCKING COVER	ea	ü	ü	ü	ü

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\*\* Static evaporation loss and static hold time are normal. Actual rate and hold time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

## Accessories



Cork



Locking Cover



Canister

# FOR TRANSPORTATION

This series is designed for sample transportation with special side or bottom reinforcements.

## MAIN FEATURES:

- High-strength aluminum alloy structure
- Multi-layer thermal isolation design
- Optional locking cover to protect stored biological samples
- Optional roller base to move the container easily
- Protective jacket to prevent collision
- Two-year vacuum warranty



## Specifications

MODEL	UNIT	YDS-35B-125	YDS-50B	YDS-50B-80	YDS-50B-125	YDS-50B-200	
PART NUMBER*	-	20005461	21087149	20005463	20005464	20005465	
CAPACITY	L	35.5	50.0	50.0	50.0	50.0	
EMPTY WEIGHT	kg	15.3	21.1	21.1	21.5	22.0	
NECK DIAMETER	mm	125	50	80	125	200	
OUTER DIAMETER	mm	473	500	500	500	500	
HEIGHT	mm	690	720	805	785	770	
STATIC EVAPORATION LOSS**	L/d	0.35	0.20	0.26	0.37	0.57	
STATIC HOLD TIME	d	102	252	189	134	87	
CANISTER OUTER DIAMETER	mm	97	38	63	97	-	
CANISTER HEIGHT	mm	120/276	120/276	120/276	120/276	-	
NUMBER OF CANISTERS	ea	6	6	6	6	-	
STRAW HOLDING CAPACITY (SINGLE LEVEL)	0.5ML	ea	5124	792	2244	5124	-
	0.25ML	ea	11952	1788	5022	11952	-
STRAW HOLDING CAPACITY (DOUBLE LAYER)	0.5ML	ea	9048	1284	3624	9048	-
	0.25ML	ea	19944	2832	8460	19944	-
NUMBER OF CANES	ea	198	24	72	198	-	
NUMBERS OF VIALS	ea	990	120	360	990	-	
OPTIONAL LOCKING COVER	ea	ü	ü	ü	ü	ü	

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## Accessories



# LARGE CALIBER



This series of containers feature their large caliber, applying to make short-term storage of large biological products and cold pressing for machine accessories.

## MAIN FEATURES:

- High-strength aluminum alloy structure
- Multi-layer thermal isolation design
- Protective jacket to prevent collision
- Two-year vacuum warranty



## Specifications

MODEL	UNIT	YDS-5-200	YDS-10-125	YDS-13-125	YDS-15-125	YDS-35-200
PART NUMBER*	-	20005428	2005433	20005436	20005438	20005450
CAPACITY	L	5.0	10.0	13.0	16.0	35.5
EMPTY WEIGHT	kg	5.3	7.2	7.9	8.9	15.3
NECK DIAMETER	mm	200	125	125	125	200
OUTER DIAMETER	mm	287	303	303	355	473
HEIGHT	mm	320	535	610	610	670
STATIC EVAPORATION LOSS**	L/d	1.67	0.30	0.30	0.30	0.56
STATIC HOLD TIME	d	3	33	43	53	63
CANISTER OUTER DIAMETER	mm	-	-	-	-	-
CANISTER HEIGHT	mm	-	-	-	-	-
NUMBER OF CANISTERS	ea	-	-	-	-	-
STRAW HOLDING CAPACITY (SINGLE LEVEL)	0.5ML	ea	-	-	-	-
	0.25ML	ea	-	-	-	-
STRAW HOLDING CAPACITY (DOUBLE LAYER)	0.5ML	ea	-	-	-	-
	0.25ML	ea	-	-	-	-
NUMBER OF CANES	ea	-	-	-	-	-
NUMBERS OF VIALS	ea	-	-	-	-	-
OPTIONAL LOCKING COVER	ea	-	-	-	ü	ü

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## Accessories



Level Measuring Scale



Level Monitor

# CONTAINER WITH RACKS

This series is designed to store large quantities of vials while maintaining low liquid nitrogen consumption. These containers are ideally suited for medical and biological science and research.

## MAIN FEATURES:

- Optional locking cover to protect stored biological samples
- Racks to provide large storing capacity
- Optional roller base to move the container easily
- The optional level monitor automatically displays the temperature in the container and sends an audible alarm when the temperature exceeds the control range, thus protecting stored samples



## Specifications

MODEL	UNIT	YDS-47-127	YDS-65-216	YDS-120-216	YDS-175-216
PART NUMBER*	-	21099665	20005470	20005471	20005475
CAPACITY	L	47.0	65.0	121.0	175.0
EMPTY WEIGHT	kg	19.0	27.5	43.0	54.5
NECK DIAMETER	mm	127	216	216	216
OUTER DIAMETER	mm	500	573	573	676
HEIGHT	mm	675	710	1000	1040
STATIC EVAPORATION LOSS**	L/d	0.33	0.79	0.87	0.87
STATIC HOLD TIME	d	142	82	139	202
NUMBER OF RACKS	ea	7	5	5	7
MEASUREMENT OF RACK	mm	82x84	142x144	142x144	142x144
MEASUREMENT OF BOX	mm	76x76	134x134	134x134	134x134
NUMBERS OF VIALS	ea	875	2025	4050	5670
OPTIONAL LOCKING COVER	ea	ü	ü	ü	ü

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## Accessories



Rack



Carrying Cart

This series is designed specifically for liquid nitrogen storage and is characterized by its small calibers and low static evaporation loss.

## MAIN FEATURES:

- High-strength aluminum alloy structure
- Multi-layer thermal isolation design
- Protective jacket to prevent collision



## Specifications

MODEL	UNIT	YDS-6L	YDS-10L	YDS-20L	YDS-30L	YDS-35L	YDS-50L
PART NUMBER*	-	20413289	20601714	20601711	20601710	20601713	20601715
CAPACITY	L	6.0	10.0	20.0	31.5	35.5	50.0
EMPTY WEIGHT	kg	5.0	6.2	11.2	12.9	13.8	21.1
NECK DIAMETER	mm	50	50	50	50	50	50
OUTER DIAMETER	mm	287	303	409	446	473	500
HEIGHT	mm	435	530	650	670	680	805
STATIC EVAPORATION LOSS**	L/d	0.12	0.10	0.10	0.10	0.11	0.20
STATIC HOLD TIME	d	63	101	202	295	333	252
CANISTER OUTER DIAMETER	mm	-	-	-	-	-	-
CANISTER HEIGHT	mm	-	-	-	-	-	-
NUMBER OF CANISTERS	ea	-	-	-	-	-	-
STRAW HOLDING CAPACITY	ea	-	-	-	-	-	-
OPTIONAL LOCKING COVER	ea	ü	-	-	-	-	-

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## Accessories



Cork



Level Measuring Scale

# DRY SHIPPER/ VAPOR SHIPPER

Liquid nitrogen absorbent is designed in the vessel of this series of containers, which absorbs and stores liquid nitrogen inside. Even if the container is turned over during transportation, liquid nitrogen never spills out. With lower static evaporation loss, these containers are especially suitable for air transportation

## MAIN FEATURES:

- High-strength aluminum alloy structure, light empty weight
- Optional locking cover to protect stored biological samples
- Protective jacket to prevent collision
- Two-year vacuum warranty



## Specifications

MODEL	UNIT	YDH-1-127	YDH-1-200	YDH-3	YDH-8-80	YDH-8-90
PART NUMBER*	-	21031802	21015255	20005473	20005474	20670835
CAPACITY	L	1.0	1.0	3.5	8.0	8.0
EMPTY WEIGHT	kg	2.5	5.8	5.2	8.9	11.4
NECK DIAMETER	mm	127	200	50	80	90
OUTER DIAMETER	mm	195	287	224	303	406
HEIGHT	mm	400	320	505	590	485
STATIC EVAPORATION LOSS**	L/d	1.6	2.4	0.14	0.22	0.35
STATIC HOLD TIME	d	15hr	10hr	25	36	23
CANISTER OUTER DIAMETER	mm	-	-	38	70	70
CANISTER HEIGHT	mm	-	-	276	276	127
NUMBER OF CANISTERS	ea	-	-	1	1	6
STRAW HOLDING CAPACITY (SINGLE LEVEL)	0.5ML	-	-	214	820	2588
	0.25ML	-	-	472	1780	6192
NUMBER OF CANES	ea	-	-	4	15	-
NUMBERS OF VIALS	ea	-	-	20	75	-
OPTIONAL LOCKING COVER	ea	-	-	√	√	√

Remarks: "YDH" is the abbreviation of "Liquid Nitrogen Dry Shipper\* in Chinese.

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## Accessories



Cork



Locking Cover



Canister



# PUSHCART



**Stainless steel pushcart makes it smooth to move large liquid nitrogen containers. Tipping Stand can be used for pouring liquid nitrogen.**



## Specifications

MODEL	UNIT	YDC-470	YDC-470F	YDC-470F-30
PART NUMBER*	-	20005481	20603041	20613798
WEIGHT	kg	5.5	8.5	8.5
RANGE OF CONTAINERS	L	20-50	35	30
CAPACITY DIMENSION	OUTER DIAMETER	mm	600	600
	HEIGHT	mm	900	692
OPTIONAL LOCKING COVER	kg	70	70	70

Remarks: "YDC" is the abbreviation of "Liquid Nitrogen Pushcart" in Chinese.

# AUTO-BOOSTING LIQUID NITROGEN PUMP

**The product maintains lower evaporation loss and features a safety release. Using a hand-aspired ball (ZYB-5) or foot cylinder (ZYB-8), a small quantity of liquid nitrogen inside will be vaporized and pressurized, which force liquid nitrogen through the spout.**



## Specifications

MODEL	UNIT	YDC-470	YDC-470F
PART NUMBER*	-	20005478	20005477
HEIGHT	mm	1050.0	950.0
WEIGHT	kg	3.5	7.4
DRAINAGE CAPACITY	L/min	≥5	≥8
OPERATING FREQUENCY	Time/min	30-40	50-60
OPERATING WAY	-	By Hand	By Foot

Remarks: "ZYB" is the abbreviation of "Auto-boosting Liquid Nitrogen Pump" in Chinese.

