

# Self-pressurized Series for LN<sub>2</sub> Storage and Supply



## Scope of Application

Liquid Nitrogen Supplement Series for LN<sub>2</sub> Storage and Supply incorporates the latest innovation, its unique design utilises the pressure generated from the vapourisation of a small amount liquid nitrogen to discharge LN<sub>2</sub> into other containers. Storage capacities range from 5 to 500 litres.

## Innovative Design

- Decant Valves
- Integral Safety Mechanisms
- Liquid Storage
- 5 Year Vacuum Warranty
- Stainless Steel Construction
- Pressure Raising

# Self-pressurized Series for LN<sub>2</sub> Storage and Supply

## Key Features

- All models are equipped with safety valves
- All welded stainless steel construction
- Rotary ring construction
- Labelled valves for easy identification
- 5 year vacuum warranty

## Product Advantages

### Stainless Steel Structure

Stainless steel structure can withstand the most demanding environment and ensure long-lasting security. It also provides reduced evaporation loss rate, compared with conventional welding insulation tanks.

### Casters

All models have four casters for better mobility and convenient use in different occasions.

### Variety of Accessories

Each Self-pressurized Series for LN<sub>2</sub> Storage and Supply model is equipped with a pressure valve, a drain valve, a relief valve, and a pressure gauge.

## Accessories

Transfer Hose



Float-type Liquidometer



## Additional Series for Liquid Nitrogen Tank

(Comparison between Standard Series and K Series)

Standard series



K series



## New Functions of K Series

### Digital Display Level Gauge

DLZ-300  
Digital display of fluid level  
Remote data transmission  
function



### Large diameter vent valve

Rapid relief of  
over pressure  
Protection of  
safety valve



### Pressure stabilizing valve

Stabilize fluid pressure  
during auto filling



## Technical Parameters



Model	YDZ-5 —	YDZ-15 —	YDZ-30 —	YDZ-50 —	YDZ-100 YDZ-100K
<b>Performance</b>					
Volume of LN <sub>2</sub> (L)	5	15	30	50	100
Static Evaporation (L/Day)	0.15	0.38	0.75	1	1.3
LN <sub>2</sub> Output (L/Min)	2	2	3	3	4
<b>Dimensions</b>					
Height (mm)	510	750	879	991	1185
Outside Diameter (mm)	329	404	454	506	606
Empty Weight (kg)	15	23	32	54	75
Full Weight (kg)	19.1	35.3	56.6	95.0	157.0
Shipping Weight (kg)	28	34	47	63	98
Pressure Parameters (MPa)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099, 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0-0.25				

Model	YDZ-150 —	YDZ-200 YDZ-200K	YDZ-240K —	YDZ-300 YDZ-300K	YDZ-500 YDZ-500K
<b>Performance</b>					
LN <sub>2</sub> Capacity (L)	150	200	240	300	500
Static Evaporation (L/Day)	1.95	2.4	2.9	3.3	5.5
LN <sub>2</sub> Output (L/Min)	6	8	8	8	10
<b>Dimensions</b>					
Height (mm)	1188	1265	1350	1459	1576
Outside Diameter (mm)	706	758	758	857	1008
Empty Weight (kg)	102	130	148	202	255
Full Weight (kg)	225	296	350	448	665
Shipping Weight (kg)	132	164	177	232	324
Pressure Parameters (MPa)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099, 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0-0.25, 6. Rupture disc burst pressure 0.47.				

\* Static evaporation and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

## Product List



Model	Product	Model	Description and Accessories
YDZ	Self-pressurized Filling Tank	YDZ-5	Includes transfer hoses (ZG-DN10/1.5)
	Self-pressurized Filling Tank	YDZ-15	
	Self-pressurized Filling Tank	YDZ-30	Includes transfer hoses (ZG-DN10/1.5)
	Self-pressurized Filling Tank	YDZ-50	
	Self-pressurized Filling Tank	YDZ-100	Includes transfer hoses (ZG-DN10/1.5) and float-type liquidometer
	Self-pressurized Filling Tank	YDZ-150	
	Self-pressurized Filling Tank	YDZ-200	
	Self-pressurized Filling Tank	YDZ-300	
	Self-pressurized Filling Tank	YDZ-500	
	Self-pressurized Filling Tank	YDZ-100K	Includes transfer hoses (ZG-DN10/1.5), Digital display level gauge (DLZ-300) and pressure stabilizer. Having the function of remote transmission of liquid level data, can be used for automatic filling
	Self-pressurized Filling Tank	YDZ-200K	
	Self-pressurized Filling Tank	YDZ-240K	
	Self-pressurized Filling Tank	YDZ-300K	
	Self-pressurized Filling Tank	YDZ-320K	
	Self-pressurized Filling Tank	YDZ-500K	
Accessories	Digital Display Level Gauge	DLZ-300 (YDZ-100K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-100K)
	Digital Display Level Gauge	DLZ-300 (YDZ-200K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-200K)
	Digital Display Level Gauge	DLZ-300 (YDZ-240K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-240K)
	Digital Display Level Gauge	DLZ-300 (YDZ-300K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-300K)
	Digital Display Level Gauge	DLZ-300 (YDZ-320K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-320K)
	Digital Display Level Gauge	DLZ-300 (YDZ-500K)	Digital display real time liquid nitrogen percentage of self pressurized tank, low power consumption, wireless transmission; (YDZ-500K)
	Float-type Liquidometer	FZ-100	Suitable for YDZ-100
	Float-type Liquidometer	FZ-150	Suitable for YDZ-150
	Float-type Liquidometer	FZ-200	Suitable for YDZ-200
	Float-type Liquidometer	FZ-300	Suitable for YDZ-300
	Float-type Liquidometer	FZ-500	Suitable for YDZ-500
	Single-layer Transfusion Hose	ZG-DN10/1.5	Diameter10mm, length 1.5m, suitable for YDZ series

# Self-pressurized Series for LN<sub>2</sub> Storage and Supply

Model	Product	Model	Description and Accessories
Cryobox	Vial Cane	(3-type)	Used to hold 3 vials (2ml)
	Vial Cane	(6-type)	Used to hold 6 vials (2ml)
	Plastic Cryo Box	5*5(2.0)	Used to store 1.8ml / 2ml vial (25 holes)
	Plastic Cryo Box	9*9(2.0)	Used to store 1.8ml / 2ml vial (81 holes)
	Plastic Cryo Box	9*9 (5.0)	Used to store 4.5 / 4.7/5ml vial (81 holes)
	Plastic Cryo Box	10*10 (2.0)	Used to store 1.8ml/2ml vial (internally threaded,100 holes)
	Plastic Cryo Box	Y-37	Suitable for round rack to store 1.8ml/2ml vial (37 holes)
	Plastic Goblets	SNT-97	Suitable for diameter 97mm canisters
	Blood Bag Cryo Box	25ml (791 OS/U)	One bag per box, rocker arm type
	Blood Bag Cryo Box	50ml (4R9951)	One bag per box, drawer type
	Blood Bag Cryo Box	250ml (4R9953)	One bag per box, rocker arm type
	Plastic Sleeve for Vial Cane	5016-0002 (6-type)	Suitable for vial cane that can hold 6 vials
	Aluminium Cryobox	8*1 (2.0)	Used to store 1.8ml/2ml vials (8 holes)
	Stainless Steel Cryo Box	5*5 (5.0)	Used to store 4.5ml/4.7ml/5ml vials (25 holes)
Other Accessories	Valve Adaptor	CGA295	Used to connect the valve of YDZ self-pressurized tank with transfer hose
	Cryogenic Solenoid Valve	DN7.0 (ASCO 24V)	Suitable for piping pressure≤0.5MPa
	Cryogenic Solenoid Valve	DN7.0 (JASA 24V)	Suitable for piping pressure≤0.5MPa
	Vacuum Insulated Hose	GRG-DN10/1.0	Diameter10mm, length 1m, special use for liquid nitrogen transferring, connection type for both side and length can be customized, charged by meter
	Vacuum Insulated Hose	GRG-DN10/2.0	Diameter10mm, length 2m, special use for liquid nitrogen transferring, connection type for both side and length can be customized, charged by meter
	Transfer Hose	ZG-DN10/1.5	Diameter10mm, length 1.5m, suitable for YDZ series
	Transfer Hose	BG-DN10/1.0	Diameter10mm, length 1.0m, suitable for liquid nitrogen pump YDB series
	Transfer Hose	RG-DN10	Diameter 10mm, used for liquid nitrogen transferring, fitting and length can be customized, charged in meters.
	Transfer Hose	RG-DN6	Diameter 6mm, used for liquid nitrogen transferring, fitting and length can be customized, charged in meters.
	Hose Heat Insulation Cotton	BMT-DN10	Suitable for DN10 single layer metal hose, 1 meter
	Cryogenic Gloves	ST-32	Overall length 320mm
	Cryogenic Gloves	ST-45	Overall length 450mm
	Cryogenic Gloves	ST-72	Overall length 720mm
	Level Measuring Scale	YWC-100	Measuring length1000mm

Product appearance and specifications are subject to change without notice

**000 «Диаэм»**

**Москва**  
ул. Магаданская, д. 7, к. 3 ■ тел./факс: (495) 745-0508 ■ sales@dia-m.ru

**www.dia-m.ru**

**С.-Петербург**  
+7 (812) 372-6040  
spb@dia-m.ru

**Новосибирск**  
+7(383) 328-0048  
nsk@dia-m.ru

**Воронеж**  
+7 (473) 232-4412  
vrn@dia-m.ru

**Йошкар-Ола**  
+7 (927) 880-3676  
nba@dia-m.ru

**Красноярск**  
+7(923) 303-0152  
krsk@dia-m.ru

**Казань**  
+7(843) 210-2080  
kazan@dia-m.ru

**Ростов-на-Дону**  
+7 (863) 303-5500  
rnd@dia-m.ru

**Екатеринбург**  
+7 (912) 658-7606  
ekb@dia-m.ru

**Кемерово**  
+7 (923) 158-6753  
kemeroovo@dia-m.ru

**Армения**  
+7 (094) 01-0173  
armenia@dia-m.ru

