



# Suzhou Glorair Purifying Equipment Co., Ltd.

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[www.IndustrialCleanAir.com](http://www.IndustrialCleanAir.com) [www.Glorair.com](http://www.Glorair.com)

## Explosion Vent Rupture Discs



### Product Features

- Widest range of industrial applications
- Largest relief area
- Sensitive action and highest accuracy
- Best sealing quality
- Corrosion resistance
- No blockage

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## Conventional Domed Bursting Disc

### 1. LP Bursting Disc

#### Structure features:

The bursting disc is of single-layer diaphragm, and they burst due to tensile stresses when the bursting pressure is applied to the concave side of the bursting disc. Therefore, this kind of bursting disc is also called tensile bursting disc.



#### Technical features:

1. Applied to gas, liquid medium and the operating conditions of higher bursting pressure;
2. With the support to withstand back pressure (code: LPT);
3. Maximum operating pressure can reach 70% of the bursting pressure;
4. Fragments may arise in bursting, so the serial usage with the safety relief valve is not recommended.
5. Due to material restrictions on its own strength, bursting pressure has some limitations.

### 2. LK Bursting Disc

#### Structure features:

This type of bursting discs has one or more layers at least one of which shall have slits or slots so as to reduce its strength and to control the bursting pressure.



#### Technical features:

1. Applied to gas, liquid medium and the operating conditions of low bursting pressure;
2. When the coincident temperature is determined, the applicable temperature of sealing film shall be taken into account;
3. Maximum operating pressure can reach 80% of the bursting pressure;
4. Fragments may arise in bursting, so the serial usage with the safety relief valve is not recommended.
5. LK bursting disc with large diameter may gain extremely low bursting pressure, applicable in dust pressure-relief and explosion-suppression occasions;
6. Code of Products without support is LK, and the code is LKT.

# Conventional Domed Bursting Disc

## 3. LC Bursting Disc

### Structure features:

The bursting disc is of single layer diaphragm. The cross recess or annular recess is made in the concave or convex to weaken the strength. When the bursting pressure is reached, the bursting disc opens along the score.



### Technical features:

1. Applied to gas, liquid medium
2. Applied to occasions with higher bursting pressure
3. Maximum operating pressure reaches 85% of the bursting pressure
4. No fragments are generated in bursting, and the serial usage with the safety relief valve is available

### Manufacturing range of conventional domed bursting disc

specified bursting pressure	Standard manufacturing range		1/2Standard manufacturing range		1/4Standard manufacturing range	
	Upper limit {+}	Lower limit {-}	Upper limit {+}	Lower limit {-}	Upper limit {+}	Lower limit {-}
0.30~0.40	0.045	0.025	0.025	0.015	0.010	0.010
>0.40~0.70	0.065	0.035	0.030	0.020	0.020	0.010
>0.70~1.00	0.085	0.045	0.040	0.020	0.020	0.010
>1.00~1.40	0.110	0.065	0.060	0.040	0.040	0.020
>1.40~2.50	0.160	0.085	0.080	0.040	0.040	0.020
>2.50~3.50	0.210	0.105	1.100	0.050	0.040	0.025
>3.50	6%	3%	3%	1.5%	1.5%	0.8%

## Conventional Domed Bursting Disc

### Bursting pressure range of conventional domed bursting disc

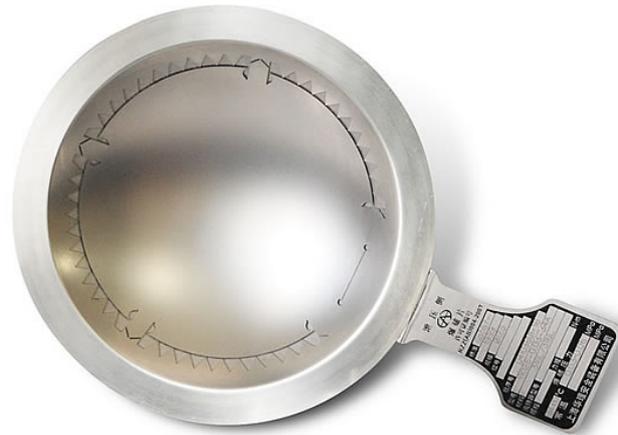
Bursting pressure in normal temperature (min ~ max MPa)			
Relief diameter{mm}	Conventional simple domed {LP}	Conventional slotted domed {LK}	Conventional scored simple domed {LC}
5	1-100	/	/
10	0.8-100	0.2-10.0	8-80
15	0.65-90	0.15-10	6-70
20	0.65-85	0.14-9	4-60
25	0.55-83	0.06-9	2-50
32	0.55-80	0.05-8	1.5-42
40	0.45-70	0.03-8	1.3 -38
50	0.4-60	0.03-7	1.0-28
65	0.4-50	0.02-6	0.5-25
80	0.35-35	0.02-6	0.4-22
100	0.3-25	0.015-5	0.3-15
125	0.28-20	0.015-5	0.3-12
150	0.25-15	0.01-3	0.3-10
200	0.25-12	0.01-2.5	0.2-8.5
250	0.2-8	0.008-2	0.2-6
300	0.2-6	0.008-1.5	0.2-5.5
350	0.15-5	0.008-1.0	0.2-2
400	0.15-3.5	0.005-0.8	0.2-1.5
450	0.15-2.5	0.003-1.0	/
500	/	0.003-1.0	/
600	/	0.003-0.6	/
1000	/	0.003-0.3	/

# Reverse Domed Bursting Disc

## 1. YK Bursting Disc

### Structure features:

The bursting disc is composed of pressure-sensitive components with saw tooth and pressure lever and sealing film. The instability of the pressure lever of the pressure-sensitive components makes the sealing film cracked by the saw tooth on the pressure-sensitive components to release during the rollover of bursting disc.



### Technical features:

1. Applied in gas medium and gas-liquid medium;
2. Applied in the places with low pressure;
3. No sparks are generated in bursting.

## 2. YE Bursting Disc

### Structure features:

Combined with the single layer diaphragm and alligator ring. This type shall function by being expelled downstream from the bursting disc holder.



### Technical features:

1. Applied in gas medium and gas-liquid medium;
2. With the high ability to withstand back pressure, it can bear the full vacuum without any support;
3. The maximum operating pressure can reach 90% of the bursting pressure;
4. Anti-fatigue, and it can be used in places with fluctuating pressure
5. No fragments are generated in bursting, and the serial usage with the safety relief valve is available;
6. No sparks are generated in bursting, but it is not suitable places with high pressure.

# Reverse Domed Bursting Disc

3. YD Bursting Disc



4. YCP Bursting Disc



5. YCH Bursting Disc



6. YC Bursting Disc



## Reverse Domed Bursting Disc

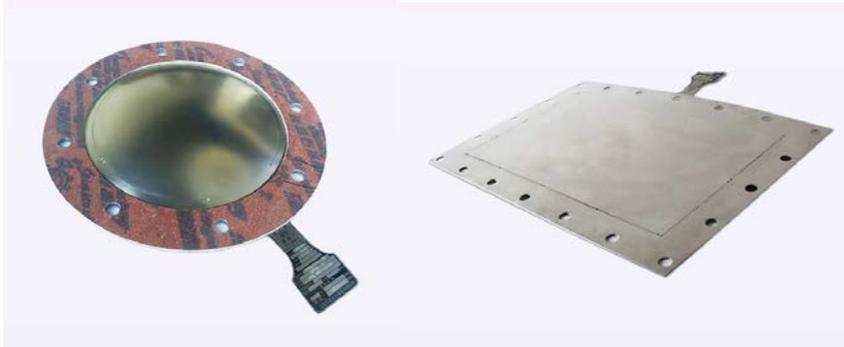
### bursting pressure range of reverse domed bursting disc

Discharge diameter (mm)	Bursting pressure under normal temperature {min~maxMPa}			
	Reverse domed with knife blade {YD}	Reverse domed with alligator {YE}	Reverse scored domed{YC}	Reverse slotted domed {YK}
20	1.8~12	0.14~5.0	0.6~11	0.4~7.0
25	0.2~12	0.14~5.0	0.6~11	0.4~7.0
32	0.2~12	0.14~5.0	0.55~10	0.4~6.0
40	0.15~12	0.13~4.2	0.5~9.0	0.2~5.0
50	0.1~11	0.12~3.4	0.4~8.0	0.15~4.0
65	0.08~10	0.11~2.6	0.35~7.0	0.03~3.0
80	0.08~9.0	0.10~1.8	0.3~6.0	0.02~2.7
100	0.08~8.0	0.10~1.3	0.3~5.0	0.01~2.4
125	0.07~7.0	0.08~1.0	0.25~4.0	0.01~2.1
150	0.07~6.0	0.08~0.7	0.25~3.5	0.008~1.8
200	0.07~4.6	0.07~0.5	0.2~2.5	0.008~1.4
250	0.06~3.0	0.07~0.35	0.2~2.0	0.005~0.9
300	0.06~2.0	0.06~0.25	0.16~2.0	0.005~0.3
350	0.06~1.5	/	/	0.005~0.1
400	0.05~1.2	/	/	0.005~0.05
450	0.05~0.8	/	/	0.005~0.05

- Note: 1) Please consult the company for the data beyond the range of this table;  
 2) For YD, YE, YK bursting disc, the highest operating temperature is 250 °C if fluoroplastic needs to be sprayed for anti-corrosion.

# Low Pressure Discharge Bursting Disc

## 1. Round and Square Bursting Disc



Round Disc

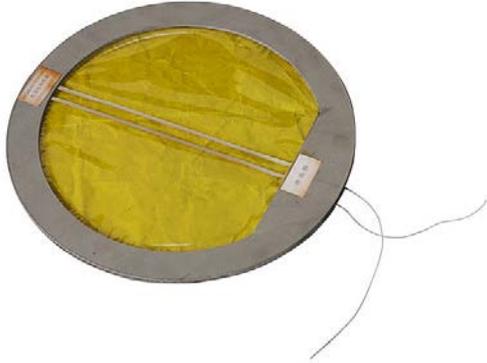
No.	Nominal size (mm)	Vent area (m <sup>2</sup> )	D(mm)	D <sub>a</sub> (mm)	D(mm)	Bolt hole	
						Quantity n	Diameter
1	Φ350	0.086	Φ434	Φ395	Φ354	12	Φ12
2	Φ400	0.126	Φ504	Φ470	Φ424	16	Φ12
3	Φ500	0.196	Φ604	Φ570	Φ524	20	Φ12
4	Φ600	0.283	Φ704	Φ670	Φ624	20	Φ12
5	Φ700	0.385	Φ804	Φ770	Φ724	24	Φ12
6	Φ800	0.503	Φ904	Φ870	Φ824	32	Φ12
7	Φ900	0.636	Φ1004	Φ970	Φ924	32	Φ12
8	Φ1000	0.785	Φ1104	Φ1070	Φ1024	36	Φ12
9	Φ1100	0.950	Φ1204	Φ1170	Φ1124	40	Φ12

Square Disc

No.	nominal size	Vent area(m <sup>2</sup> )	Outer peripheral length	centerline of bolts CXD	bolt hole	
					Quantity n	diameter
1	310x240	0.074	400x333	375x300	18	Φ14
2	410x240	0.098	500x335	470x300	20	Φ14
3	410x310	0.127	500x400	470x375	22	Φ14
4	410x410	0.168	500x500	470x470	24	Φ14
5	500x500	0.250	605x605	564x564	24	Φ14
6	580x410	0.238	670x500	640x470	28	Φ14
7	600x600	0.360	689x689	660.4x660.4	28	Φ14
8	690x490	0.338	780x580	746x546	34	Φ14
9	690x390	0.269	780x480	756x440	40	Φ12
10	690x690	0.476	800x800	750x750	20	Φ14
11	767x730	0.559	840x877	810x842	20	Φ14
12	840x840	0.706	950x950	900x900	36	Φ14
13	910x410	0.373	1000x500	970x470	28	Φ14
14	910x580	0.528	1000x670	970x640	40	Φ14
15	910x910	0.828	1000x1000	970x970	48	Φ14
16	1090x690	0.752	1200x800	1150x750	26	Φ14
17	1245x910	1.133	1335x1000	1300x970	56	Φ14

# Special Bursting Disc

1. Printed Circuit Board



2. Bidirectional



3. Membrane Rupture Valve



4. Golden Screw Cap Nut



5. Boiler GD



6. Electrical Signals



# Special Bursting Disc

## 7. Rupture Disk for Power Plant



## 8. Rupture Disk Cable



## 9. Accessories



# Flat Type Bursting Disc

1. Square Rupture Disk



2. Square Disc with Insulation



3. Round Rupture Disk

