

UHV Pressure Burst Disc

461-PBD and 461-PBD-LP

System Protection Components

Allectra Pressure Burst Discs are designed to rupture and release gas in the event of potentially hazardous pressures greater than atmospheric pressure occurring in the Vacuum System.

Two versions are offered:

- The Standard type: membrane ruptures at system pressure of max. 1.7 bar overpressure
- Low Pressure type: membrane ruptures at system pressure of max. 0.8 bar overpressure

Specifications

	461-PBD (Standard)	461-PBD-LP (Low Pressure)
Vacuum	UHV (<10 ⁻¹⁰ mbar)	
Construction	All metal with 316 Stainless Steel body	
Temperature	-200°C ... +350°C	
Bursting pressure (at 22°C) *)	typ. 1.2 ... 1.4 bar max. 1.7 bar (differential)	typ. 0.6 ..0.8 bar max. 0.8 bar (differential)
Inlet flange	DN16CF, DN40CF, 16KF, 25KF, 40KF	
Outlet flange	Optional, Gas recovery version only DN50KF	
Flow rates	DN40CF/40KF: >150 l/sec DN16CF:/16KF > 35 l/sec **)	

*: Burst pressure is increased at low temperatures up to a factor of 1.8 at -200°C and reduced by high temperatures up to a factor of 0.7 by 450°C.

Bakeout over 150°C can increase the max. burst pressure by a factor of 1.1

**: Versions with gas recovery have a flow rate of >35 l/s for all flange sizes

Features

UHV compatible, high bakeable to 350°C and leak tight to <5x10⁻¹⁰ mbar l/s

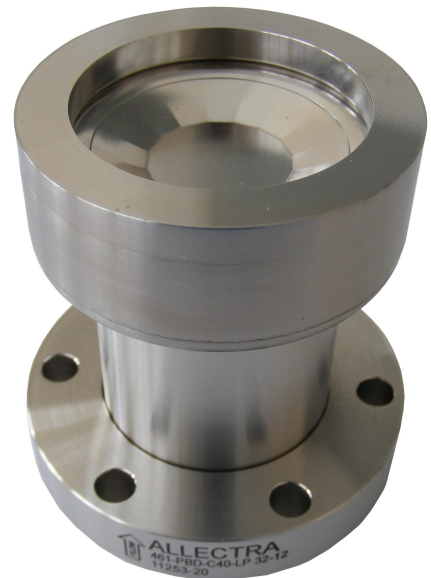
Protects sensitive components against accidental over-pressure in the Vacuum System

Optional gas recovery system to prevent gases escaping into the atmosphere

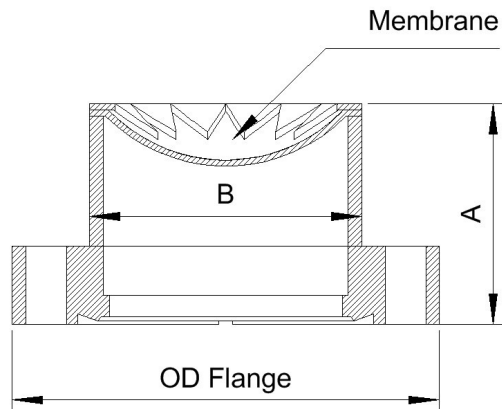
DN40CF and DN16CF versions / KF types and custom flanges



Pressure Burst Disc standard version on 40CF



Pressure Burst Disc low pressure version on 40CF



Pressure Burst Disc standard version
on 16CF

Dimensions

	Standard Version				Low Pressure Version			
	16CF	40CF	16KF	40KF	16CF	40CF	16KF	40KF
Flange								
Height A (mm)	48	24	48	23	72	72	71	71
Diam. B (mm)	45	45	45	45	59	59	59	59
Max. \varnothing (mm)	45	70	45	55	59	70	59	59

Part Numbers

461-PBD-C16	Standard Pressure Burst Disc on DN16CF flange
461-PBD-C40	Standard Pressure Burst Disc on DN40CF flange
461-PBD-K16	Standard Pressure Burst Disc on DN16KF flange
461-PBD-K40	Standard Pressure Burst Disc on DN40KF flange
461-PBD-GR-C40	Standard Pressure Burst Disc 40CF with gas recovery outlet flange DN50KF
461-PBD-C16-LP	Low Pressure Burst Disc on DN16CF flange
461-PBD-C40-LP	Low Pressure Burst Disc on DN40CF flange
461-PBD-K16-LP	Low Pressure Burst Disc on DN16KF flange
461-PBD-K40-LP	Low Pressure Burst Disc on DN40KF flange

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All data given in this sheet is carefully checked but subject to change at any time.