

# RLPS Series

# Sanitary Metal Rupture Disks

### ...provide over-pressure protection in sanitary piping system

The RLPS Sanitary Disk is an extension of ZOOK's Reverse Acting Metal Rupture Disk design. Applications include: food processing, dairy, breweries, pharmaceutical, distilling, baking, canning, cosmetics, biotechnology, and petrochemical industries.







ZOOK Sanitary disc installed in NA Style Connector

#### **RLPS Disc features :-**

- Fits standard Tri Clamp and NA sanitary fittings
   ( Please consult ZOOK Europe Ltd for compatibility with other sanitary fitting systems )
- Non fragmenting design
- Can handle a system operating pressure of up to 95 % of the discs minimum rated burst pressure.
- Low burst pressures achieved with unique scoreless design
- No scoring of dome means high dome integrity and high cycle life compared to scored designs
- Resistant to product build-up, smooth unscored convex side of dome is presented to process medium
- Disc available in a wide range of standard and exotic materials
- Standard gaskets materials are Viton, EPDM or Buna-N. PTFE & Other materials also available
- Additional TFE corrosion protection linings available ( RLPS-L )
- Suitable for Liquid, Gas & Vapour applications
- Integral (Bi) or remote (RDI-S) type burst indicators available
- Three dimensional stainless steel disc tag with full disc specification permanently engraved
- EN ISO 4126-2 (PED), ASME UD & TUV compliance available

•



**ZOOK Enterprises, LLC** 16809 Park Circle Drive Chagrin Falls, OH 44022 U.S.A.

Toll Free 800.543.1043
Phone 440.543.1010
Fax 440.543.4930
E-mail sales@zook.cc

**ZOOK Canada, Inc.** 4400 South Service Road Burlington, ON Can. L7L 5R8

Toll Free 800.370.6057
Phone 905,681,2885
Fax 905.681.8838
E-mail sales.canada@zook.cc

**ZOOK Europe, LTD.**Navigation House, Bridge Street
Killamarsh, Sheffield UK. S21 1AL

Phone 0044 (0) 1909 560999 Fax 0044 (0) 1909 560860 E-mail zookeurope@zook.cc



### RLPS Minimum and Maximum Pressure Ratings (Including Burst Tolerance)

Nominal Size	Burst Pressure – Psig ( Barg )			M.N.F.A.	Tri-Clover Ferrule Dimension	
Inches ( mm )	Minimum		Maximum	In <sup>2</sup> ( cm <sup>2</sup> )	Inches ( mm )	
	316ss*	With Liner	iviaximum	iii (ciii )	Ferrule O.D.	Ferrule I.D.
1" ( 25 mm )	11 ( 0.76 )	16 ( 1.10 )	83 (5.52)	0.35 ( 2.26 )	1.984 ( 50.4 )	0.856 ( 21.7 )
1.5" ( 40 mm )	9 ( 0.62 )	11 ( 0.76 )	27 ( 1.86 )	0.79 (5.10)	1.984 ( 50.4 )	1.356 ( 34.4 )
2" (50mm)	7 ( 0.48 )	11 ( 0.76 )	24 ( 1.66 )	1.63 ( 10.52 )	2.516 (63.9)	1.856 ( 47.1 )
3" (80mm)	6 ( 0.41 )	10 ( 0.69 )	20 ( 1.38 )	3.86 ( 24.90 )	3.579 ( 90.9 )	2.865 ( 72.5 )
4" (100mm)	3 (0.21)	8 ( 0.55 )	18 ( 1.24 )	6.82 ( 44.00 )	4.682 (118.9)	3.810 (96.8)

- Alternate Disc sizes, materials, Gasket available
- Lower Burst Pressure Ratings may be available Consult Zook
- Maximum Disc Temperature is dependent on gasket material

Available Total Performance Tolerance for the RLPS Sanitary Disc							
Burst Pressure ( Barg )		Available Performance Tolerance					
Minimum	Maximum	Standard Burst Tolerance ( Equivalent to -10% Manufacturing. Range )  Better ( Cost Adder ) Equivalent to -10% Manufacturing. Range		Best available ( Cost Adder ) Equivalent to Zero Range			
0.069	<0.172	±50%	Х	± 0.035 Barg			
0.172	<0.345	±30%	±25%	± 0.035 Barg			
0.345	<0.483	±20%	±15%	± 0.035 Barg			
0.483	<0.690	±20%	±15%	± 0.055 Barg			
0.690	<1.034	±20%	±15%	± 0.090 Barg			
1.034	<1.1793	±20%	±15%	± 0.138 Barg			
1.1793	<2.759	±15%	±12.5%	± 0.138 Barg			
2.759	<max< td=""><td>±10%</td><td>±7.5%</td><td>± 5 %</td></max<>	±10%	±7.5%	± 5 %			

Gaskets				
Material	Max Temperature limit			
Black Buna N*	110°C			
White Buna N*	110°C			
Black EPDM*	129°C			
Black Viton*	204°C			
Clear Silicone	204°C			
Red Silicone	204°C			
PTFE*	260°C			

<sup>\* =</sup> Stocked material

## Optional Torque-Rite® Nut



#### Features

- An audible "click" indicating correct inch/pounds force
- Maintains the recommended constant 50inch/pounds force
- Retrofits all sanitary clamps, mini through 6"
- No torque wrench or special training required



**ZOOK Enterprises, LLC** 16809 Park Circle Drive Chagrin Falls, OH 44022 U.S.A.

Toll Free 800.543.1043
Phone 440.543.1010
Fax 440.543.4930
E-mail sales@zook.cc

**ZOOK Canada, Inc.** 4400 South Service Road

4400 South Service Road Burlington, ON Can. L7L 5R8 Toll Free 800.370.6057 Phone 905.681.2885 Fax 905.681.8838 E-mail sales.canada@zook.cc **ZOOK Europe, LTD.**Navigation House, Bridge Street
Killamarsh, Sheffield UK. S21 1AL

Phone **0044 (0) 1909 560999** Fax **0044 (0) 1909 560860** E-mail **zookeurope@zook.cc** 

