

# RLPS Series Sanitary Metal Rupture Disks

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.

## **Features**

- Provides over-pressure protection in sanitary piping system
- Ideal for high purity and corrosion resistance service
- Designed for Non-fragmentation
- Rugged, scoreless design offers higher cycle life when compared to scored reverse acting disks
- Excels in liquid, gas, or two-phase applications
- 0% manufacturing range is standard
- Standard operating ratio of 90% of the low end of the burst tolerance – may be extended to 95% of the minimum burst pressure. (Contact ZOOK for operating ratio on pressures below 40 psig)
- Self supporting under full vacuum (with included support ring)
- No special components required for installation
   mounts using industry standard components
- Resists product buildup. Only the smooth convex side of the disk is exposed to the process medium
- Installs using industry standard
   Tri-clamp®/Tri-clover® fittings
   (NA-Connect mounting also available)
- Standard gasket material: Black Buna-N (see chart on reverse page for alternate materials)
- Sizes 1" (25mm) through 4" (100mm)
- CE and TUV compliance available

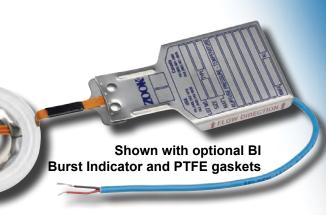
# **Optional Features**

- TFE liners are available to provide additional protection from corrosive media
- Burst indication (Integral or Ferrule mounted)
- Torque-rite<sup>®</sup> sanitary clamp nut (eliminates the problems associated with over/under tightening)

## **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









# **RLPS Series Specifications**

### **Minimum and Maximum Pressure Ratings**

Size in. (mm)	Burst Pressure – psig (bar)				Tri-Clover Ferrule Dimensions	
	Minimum		Maximum	MNFA in² (cm²)	in (mm)	
	316SS*	w/liner	Waximum	iii (Ciii )	Ferrule OD	Tube ID
1"	11	16	83	0.35	1.984	0.856
25 mm	(0.76)	(1.10)	(5.72)	(2.25)	(50.4)	(21.7)
1-1/2"	9	11	27	0.79	1.984	1.356
40 mm	(0.62)	(0.76)	(1.86)	(5.09)	(50.4)	(34.4)
2"	7	11	24	1.63	2.516	1.856
50 mm	(0.48)	(0.76)	(1.66)	(8.77)	(63.9)	(47.1)
3"	6	10	20	3.86	3.579	2.865
80 mm	(0.41)	(0.69)	(1.38)	(24.9)	(90.9)	(72.5)
4"	3	8	18	6.82	4.682	3.810
100 mm	(0.21)	(0.55)	(1.24)	(43.99)	(118.9)	(96.8)

#### Notes:

Maximum disk temperature is dependent on gasket material selected

#### Manufacturing Range / Burst Tolerance

Specified Burst Pressure Rating	Manufacturing Ranges	Burst Tolerance				
1 to below 5		+/-0.50				
(0.07 to below 0.34)		(+/-0.03)				
5 to below 10	00/ 50/ 400/	+/-0.80				
(0.34 to below 0.69)		(+/-0.06)				
10 to below 15		+/-1.30				
(0.69 to below 1.03)	0%, -5%, -10%	(+/-0.09)				
15 to 40		+/-2.00				
(1.03 to 2.76)		(+/-0.14)				
Above 40		+/-5%				
(2.76)		+/-5%				

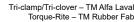
#### Notes:

- 0% manufacturing range might not be available in all materials
- Burst tolerances are the maximum expected variation from the disk's marked burst pressure

#### **Gaskets**

Material	Max. Temperature		
Black Buna-N <b>≜</b>	230°F (110°C)		
White Buna-N	230°F (110°C)		
Black EPDM <b>⁴</b>	230°F (110°C)		
Black Viton <b>≜</b>	400°F (204°C)		

▲- Stocked material





RLPS 012018

# Visit us at www.zookdisk.com

#### SERVING AMERICA, CENTRAL SERVING EUROPE, **& SOUTH AMERICA**

16809 Park Circle Drive Chagrin Falls, Ohio 44022 **United States** 

Toll Free: +1 800 543 1043 Phone: +1 440 543 1010 Fax: +1 440 543 4930 E-mail: sales@zookdisk.com

# **MIDDLE EAST & AFRICA**

Navigation House, Bridge St. Killamarsh, Sheffield, S21 1AL United Kingdom

Phone: +44 (0) 1909 560999 Fax: +44 (0) 1909 560860

#### **SERVING CANADA**

4400 South Service Road Burlington, Ontario, L7L 5R8 Canada

Toll Free: +1 800 370 6057 Phone: +1 905 681 2885 E-mail: sales.europe@zookdisk.com Fax: +1 905 681 8838

#### **SERVING ASIA PACIFIC**

Unit No. 23A-05, Menara Landmark No.12, Jalan Ngee Heng 80000 Johor Bahru, Johor, Malaysia

Phone: +60 (7) 2910099 Fax: +60 (7) 2910096



<sup>\*</sup> Alternate sizes, disk materials, gasket materials and lower burst ratings may be available on request. Contact ZOOK for more information.