

PRESSURE RELIEF PRODUCT GUIDE



Fike® OVERPRESSURE PROTECTION



For over 60 years Fike has been the leader in rupture disc innovation and pressure relief solutions. Fike products are compliant with global code regulations and are designed to meet or exceed industry requirements for performance, reliability, and quality. From safeguarding your critical manufacturing processes to protecting your pressure relief valves (PRV's), Fike products are part of the critical path to lowering your costs and helping you achieve higher profitability.

Common causes for overpressure:

- Blocked discharge
- Thermal expansion
- Chemical runaway reaction
- External fire or loss of coolant
- Loss of purge gas

Lack of safeguarding can cause:

- Mechanical damage
- Loss of product
- Environmental damage
- Personnel injuries
- Production downtime

	Fike Model	Design	Size Range	Burst Pressure Range	Performance Attributes					Process Media		Rupture Disc Holders						PRV/SRV Protection	
					Operating ratio	Non-Fragmenting	Vacuum Resistant	Pulsating /Cyclic	Sanitary	Liquid	Vapor/ Gas	Bolted/Type	Pre-Torque	Screw Type	Union Type	Ferrules	Companion Flanges		
Reverse	AXIUS	Smooth, Reverse Acting Lowest BP	1 - 12 in 25 - 300 mm	7 - 600 PSIG .48 - 41.37 BARG .49 - 42.18 KG/CM ²	95%*	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	AXIUS SC	Smooth, Reverse Acting Lowest BP	1 - 4 in 25 - 100 mm	10 - 275 PSIG .69 - 18.96 BARG .70 - 19.33 KG/CM ²	95%*	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	SRL	Reverse Scored, Low BP	1 - 8 in 25 - 200 mm	10 - 230 PSIG .69 - 15.86 BARG .70 - 16.17 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	SRX	Reverse Scored	1 - 24 in 25 - 600 mm	27 - 720 PSIG 1.9 - 49.7 BARG 1.9 - 50.62 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	SR-H	Reverse Scored, Sanitary	1-1/2 - 4 in 40 - 100 mm	12 - 140 PSIG .83 - 9.66 BARG .84 - 9.84 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	MRK	Reverse Acting Knife Blades	1 - 42 in 25 - 1100 mm	4 - 1440 PSIG .28 - 99.3 BARG .28 - 101.24 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Forward	Poly-SD	Forward Acting Scored	1/2 - 24 in 15 - 600 mm	20 - 3000 PSIG 1.38 - 206.8 BARG 1.40 - 210.92 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	SCRD	Forward Acting Scored	1/2 - 24 in 15 - 600 mm	150 - 6000 PSIG 10.35 - 413.7 BARG 10.55 - 421.84 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	SCRD FSR	Forward Acting Scored-High Pressure	1 - 24 in 25 - 600 mm	100 - 6000 PSIG 6.9 - 413.7 BARG 7.03 - 421.84 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	HO/HOV	Composite	1 - 42 in 25 - 1100 mm	1.5 - 6000 PSIG .10 - 413.7 BARG .11 - 421.84 KG/CM ²	80%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	P Series	Conventional Pre-bulged	1/2 - 24 in 15 - 600 mm	1.5 - 100,000 PSIG .10 - 689.7 BARG .11 - 7030 KG/CM ²	70%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	AD Series	Flat Composite	2 - 24 in 50-600 mm	1 - 15 PSIG .07 - 1.03 BARG .07 - 1.05 KG/CM ²	50%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	GD Series	Graphite	1/2 - 24 in 15 - 600 mm	25 - 1000 PSIG .02 - 68.9 BARG .02 - 70.31 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	ERD	Extruder	3/16 - 5 in 4.5 - 127 mm	1500 - 50,000 PSIG 103.4 - 3448 BARG 105.46 - 3515 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	SHX	Sanitary Forward Acting Scored	1-1/2 - 2 in 40 - 50 mm	300 - 1500 PSIG 20.68 - 103.45 BARG 21.09 - 105.46 KG/CM ²	90%	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Bi-Directional	LO-V	Bi-Directional, Ultra Low BP	3 - 8 in 75 - 200 mm	1" WC - 150 PSIG .002 - 10.34 BARG .003 - 10.54 KG/CM ²	80%	•	•	•	•	•	•	•	•	•	•	•	•	•	

* 100% of Minimum Burst Pressure according to CEN ISO 4126-2.

PRODUCT OVERVIEW

SANITARY

- Meets SIP/CIP requirements
- Food, beverage, pharmaceutical, and bio-tech industries
- Integrated burst indicator option



AXIUS SC 95%

Attributes

Media

Holders

PRV/SRV Protection

VALVE GUARD

SR-H 90%

Attributes

Media

Holders

PRV/SRV Protection

VALVE GUARD

SHX 90%

Attributes

Media

Holders

PRV/SRV Protection

VALVE GUARD

LO-V 80%

Attributes

Media

Holders

REVERSE BUCKLING

- Axis - 95% operating ratio
- Highest cycle life performance
- DiscLoc™ Locator tab for perfect positioning



AXIUS 95%

Attributes

Media

Holders

PRV/SRV Protection

VALVE GUARD



SRL 90%

Attributes

Media

Holders

PRV/SRV Protection

VALVE GUARD



SRX 90%

Attributes

Media

Holders

PRV/SRV Protection

VALVE GUARD

FORWARD ACTING SCORED

- Fail-safe design regardless of disc orientation
- Poly-SD - Ideal for polymerization processes
- SCRDFSR - Ring/groove prevents slippage



POLY-SD 90%

Attributes

Media

Holders

PRV/SRV Protection

VALVE GUARD



SCRDFSR 90%

Attributes

Media

Holders

PRV/SRV Protection

VALVE GUARD

COMPOSITE

- Vacuum support option
- AD - Designed for atmospheric vessels
- Lo-V - Bi-directional rupture disc



HOV 80%

Attributes

Media

Holders



AD 50%

Attributes

Media

Holders

SPECIAL APPLICATIONS

- ERD - Protection for extrusion processes in a variety of sizes and burst pressures
- TOP HAT - Allows the disc to be flush mounted
- MRK - Reverse-acting, knife blade assembly
- GD - Graphite construction that is inert to most chemicals



ERD 90%

Attributes

Media



TOP HAT 90%

Attributes

Media



MRK 90%

Attributes

Media

Holders



GD 90%

Attributes

Media

CONVENTIONAL

- Conventional, pre-bulged design
- 30° angular seating
- Vacuum support option



P 70%

Attributes

Media

Holders



CPV 70%

Attributes

Media

Holders

RUPTURE DISC HOLDERS

Fike makes many different holder designs and configurations to fit your application and production process. Some rupture discs require their own unique holder design, while others can be installed in a variety of different holder types.



GI HOLDER

- Most common, 2-piece design for use between companion flanges

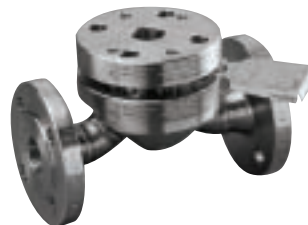


PRETORQUEABLE

- Designed to allow for assembly and torquing before installation



BRASS THROW AWAY, UNION TYPE, SCREW TYPE



VISCOUS TEE

- Designed to allow for viscous flow, preventing build-up and plugging

Holder options :

- Burst indicator
- Excess flow value
- Eyebolts
- Gauge tap
- Jack screws
- J-hook
- Studs and nuts
- Other options available

SAVE DOWNTIME, CONTROL EMISSIONS, PROTECT YOUR PRESSURE RELIEF VALVES



INCREASE

- PRODUCTION CAPACITY
- LEAKAGE PROTECTION
- PRV LIFETIME
- SAFETY
- MTBUR (Mean Time Between Unscheduled Removal)

DECREASE

- DOWNTIME/OUTAGE COSTS
- MAINTENANCE COSTS
- LOSS OF PROCESS MEDIA
- FINES FOR FUGITIVE EMISSIONS
- INITIAL PRV INVESTMENT

VALVE  GUARD™



GET YOUR PRODUCTION NUMBERS UP, BUDGET NUMBERS DOWN.

At Fike, we make it our business to safeguard your entire business, from the production line to the bottom line. That's why we offer the Fike **VALVEGUARD** concept ... a rupture/bursting disc application that can reduce your maintenance procedures, reduce emissions, increase your plant's operating potential and save you money!

ARE YOUR PRVS UNPROTECTED?

Pressure or safety relief valves (PRV/SRV) are commonly used to protect many processes ... and ultimately your business. Unfortunately PRVs are also costly to maintain and expensive to replace. Now you can safeguard your high-cost PRVs and greatly extend their service life with affordable rupture discs from Fike. When Fike rupture discs are used to isolate or guard your Pressure Relief Valves from process media and downstream contaminants, we refer to this as the **VALVEGUARD** concept. The rupture disc takes the abuse, preserving the internals of your expensive PRV and protecting it from corrosive media, build-up and polymerization.

PRVs can also be a major source of process media emissions – an increasing environmental concern. By installing Fike rupture/bursting discs upstream of your PRV, you not only protect the valve, but greatly decrease emissions. And there are additional cost saving advantages, such as possible exemption from PRV monitoring requirements, significantly reducing possible fugitive emission fines and [within the U.S.] zero daily PRV emissions calculations allow you to sell emissions credits for increased profits. More importantly, air quality benefits can lead to improved health, longevity and quality of life.

INFORMATION AT YOUR FINGERTIPS

To learn more about **VALVEGUARD** rupture discs and other Fike products and services, log on to www.fike.com. To calculate your savings using the **VALVEGUARD** concept, click on the **VALVEGUARD** Savings Tool and simply fill in the blanks. It's that simple. Other tools found on our website include:

- **DisCalc:** Your on-line rupture disc sizing tool
- **Fike Representative Locator:** Find a Fike representative in your area
- **Specification Sheets:** Get all the details on any Fike product
- **Lot Look-Up:** Track the specifications on your current product
- **Order Status:** Check the status of your existing sales order

CONTACT FIKE

Fike is a global team of experienced professionals dedicated to life and business safety. We work closely with our clients to solve highly complex problems with easy-to-use products and services.



FIKE GLOBAL MANUFACTURING, SALES AND SERVICE

AMERICAS

FIKE CORPORATION
Blue Springs, MO, USA
Tel: +1-816-229-3405
Email: fmppsales@fike.com

FIKE CANADA
Burlington, Canada
Tel: +1-905-681-3100
Email: fikecanada@fike.com

FIKE LATINA LTDA
Jundiai, Brazil
Tel: +55-11-4525-5900
Fax: +55-11-4525-1201
Email: vendas@fike.com.br

**CARIBBEAN, CENTRAL,
SOUTH AMERICA**
Houston, TX
Tel: +1-281-895-8342
Email: richard.puig@fike.com

ASIA

FIKE ASIA PACIFIC SDN BHD
Selangor Darul Ehsan, Malaysia
Tel: +60-3-7859-1462
Email: fikeap@fike.com

FIKE JAPAN
Tokyo, Japan
Tel: +81-335-951-291
Email: office@fikejapan.co.jp

FIKE INDIA PVT. LTD.
Pune, India
Tel: +91-20-2439-1947
Email: sameerp@pn2.vsnl.net.in

EUROPE

FIKE EUROPE
Herentals, Belgium
Tel: +32-14-210031
E-mail: fike-europe@fike.com

FIKE UNITED KINGDOM
Maidstone, Kent, United Kingdom
Tel: +44-1-622-677081
Email: sales@fike.co.uk

FIKE FRANCE
Cergy Pontoise Cedex, France
Tel: +33-1-30-31-31-32
Email: contact@fike.fr

FIKE DEUTSCHLAND
Mannheim, Germany
Tel: +49-621-321-67-0
E-mail: info@fike.de

FIKE ITALIA
Milano, Italy
Tel: +39-02-2952-4166
Email: webmaster@fike.it

FIKE IBERICA
Barcelona, Spain
Tel: +34-93-6000-800
Email: fike@fike.es

MIDDLE EAST

FIKE MIDDLE EAST SPC
Kingdom of Bahrain
Tel: +973-1758-3285



E-mail: fpssales@fike.com

VALVEGUARD, SRL, SRX, MRK, SR-H, Poly-SD, SCRCD, SCRCD FSR, HO, HOV, P, CPV, AD, GD, ERD, SHX, Lo-V, DisCalc, DiscSelector, DiscLoc, Lot Look-up, Axius, Axius SC, Fike and Fike Corporation are trademarks or registered trademarks of Fike Corporation.

U.S. Patents including 5,267,666; 5,467,886; 6,672,389; 6,945,420.
Additional foreign patents and U.S. patents pending.

© Copyright 2009, Fike Corporation. All rights reserved. Form No. B9098 0709 Printed in the U.S.A.

Fike®

WWW.FIKE.COM