

### Rupture Disc Questions for Quote

Today's Date:	
Requestor Name:	
Company:	
Address:	
Phone:	
Email:	

**If this is for a reorder:**

Reorder Lot # from the product tag:	
Requested Purchase Quantity:	

each

**If this is for a new application, please provide the following for full consideration of the selection:**

Please Describe the application (service, equipment, protection objective):

<b>Rupture Disc Selection</b>	Tag # (i.e. PSE-1234):	
	Size of rupture disc? (if unknown, complete page 2)	
	<b>OR</b> - Required Flow Area? (indicate U/M) (if unknown, complete page 2)	
	Required Kr value (if known)	
	Rupture (burst) pressure? (indicate U/M)	
	Rupture temperature? (indicate U/M)	
	Discharges to: (ATM, PRV ValveGuard, Disposal System)	
	Application (Primary, Secondary)	
	Does the rupture disc need to be non-fragmenting? (If under PRV - Yes.)	
	Is the media liquid, vapor or gas?	
	M.A.W.P. of vessel? (indicate U/M)	
	Operating Pressure? (indicate U/M)	
	Resulting Operating Ratio (If burst pressure <40 psig consider rupture tolerance):	
	Operating temperature? (indicate U/M)	
	Is any vacuum involved?	
	Static or pressure cycling?	
Which materials of construction are required for the rupture disc?		
Is any back pressure involved? (if so, indicate magnitude)		
Manufacturing range? (Default is Zero +0/-0% unless otherwise evaluated)		
<b>Holder Selection</b>	What holder configuration is required?	
	What is the pipe flange class / pressure rating of the process connections?	
	Which materials of construction are required for the holder?	
<b>Finalize Requirements</b>	Are any certifications required? (please indicate which)	
	Accessories (burst indication, Tell Tale Indicator, etc)?	
	Rupture Disc quantity required?	
	Holder quantity required?	
	Special Requirements:	
<b>Result</b>	Result - recommended Fike Rupture Disc:	
	Result - recommended Fike Rupture Disc Holder:	
	Result - recommended Accessories:	

each

each

U/M = unit of measure

When a size is specified, Fike Corporation assumes that adequate provisions have been made by the user/purchaser for proper venting of the pressure relieving system. A rupture disc sizing worksheet is on the next page to collect the necessary data to complete a sizing.

Required Sizing Information Inputs				
Available Sizing Options:	<sup>1</sup> -Design Code	<sup>2</sup> -Design Purpose	<sup>3</sup> -Design Case	<sup>4</sup> -Media State
	ASME Section VIII	Primary Relief	Blocked Discharge	Liquid
	API RP520	Secondary Relief	External Fire	Vapor
	EN ISO 4126-6	Primary PRV Combination	Loss of Coolant	Steam
		Secondary PRV Combination	Tube Rupture	
		Other - Describe		

Part 1:	Process Information	Values	Units of Measure
	Design Code <sup>1</sup>		N/A
	Design Purpose <sup>2</sup>		N/A
	Design Case <sup>3</sup>		N/A
	MAWP / Burst Pressure		
	Media State <sup>4</sup>		N/A
	Relief Temperature		
	Superimposed Back Pressure		

Part 2: Select Discharge Fluid	Gas / Vapor Sizing Inputs (Fill in all blanks and make sure to include appropriate units):		
	Process Information	Values	Units of Measure
	Process Media		N/A
	Back Pressure		
	Molecular Weight		N/A
	Ratio of Specific Heats (k)		N/A
	Compressibility (Z; use 1 if unknown)		N/A
	Required Relief/Flow Capacity		lbs/hr
	Liquid Sizing Inputs (Fill in all blanks and make sure to include appropriate units):		
	Process Information	Values	Units of Measure
	Process Media		N/A
	Density		
	Viscosity (if >8 cP)		cP
	Required Relief/Flow Capacity		lbs/hr
	Steam Sizing Inputs (Fill in all blanks and make sure to include appropriate units)		
Process Information	Values	Units of Measure	
Required Relief/Flow Capacity		lbs/hr	
CHOOSE STEAM CONDITION:			
Dry Saturated			
Superheated			

**Conditions Where this is Valid:**

Rupture Disc Sizing is the ultimate responsibility of the user/purchaser (Ref ASME Section VIII Div 1 part UG-125(a)). Fike can provide sizing using the Kd Method.

**Assumptions for the Kd (Coefficient of Discharge Method) method are:**

- A. The rupture disc discharges to atmosphere
- B. The inlet piping length does not exceed 8 pipe diameters
- C. The discharge piping length does not exceed 5 pipe diameters
- D. The nominal diameter of the inlet and outlet piping is equal to or greater than the rupture disc device
- E. Single Phase Fluid Discharge

Conditions outside of these assumptions or two-phase, multi-phase, reactive sizing calculations are not available from Fike.

Please seek professional assistance if necessary. A list of consultants may be provided upon request. For PRV sizing, a list of Kc factors is available in TB8103.

You may contact us or return the form to PR.Applications@Fike.com