



Gas Expansion Due to Fire PRV Sizing Information Sheet

MERCER VALVE CO., INC.
AUTO SEAT TECHNOLOGY®

Contact Name: _____
Company: _____
Location: _____
Tag/PSV No.: _____

Phone: _____
Fax: _____
Email: _____
Quantity: _____

Please indicate the units used for each field.

1. Vessel Data

- Vessel Diameter: _____
- Vessel Length (seam to seam): _____
- Vessel Orientation:
 - Vertical Horizontal Sphere
- Type of Ends:
 - End 1: Flat Head 2:1 Elliptical Hemispherical
 - End 2: Flat Head 2:1 Elliptical Hemispherical

2. Requested Connection Size and Type

The requested may not be available since it depends on orifice/valve sizing result.

- Threaded: _____
 - MNPT x FNPT
 - FNPT x FNPT
- Flanged: _____
 - RF x RF
 - RTJ x RF
 - RTJ x RTJ
- Lift Lever? None Open Lever Closed Lever

3. Operating Data

- Operating Pressure: _____
- Set Pressure: _____
- Atmospheric Pressure: _____
- Back Pressure:
 - Constant Superimposed: _____
 - Built-up: _____
 - Variable Superimposed: _____
- Allowable Overpressure (up to 21% MAWP): _____
- Known Inlet Pressure Drop: _____
- Operating Temperature: _____

4. Fluid Data

- Gas/Vapor Name: _____
- Does This Require Sour Service Trim?: Yes No NACE MR0175
- Compressibility Factor Z: _____ (Z = 1.0 if value is unknown)
- Molecular Weight: _____ or Specific Gravity: _____ (referenced to air)
- Ratio of Specific Heats: _____



THINK...MERCER FIRST®