



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: _____

➤ Allowable Overpressure (up to 21% MAWP): _____

➤ Known Inlet Pressure Drop: _____

➤ Operating Temperature: _____

○ Variable Superimposed: _____

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: _____



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