



# General 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. Requested Connection Size and Type

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

- Valve Type:  Spring Operated
  - Pilot Operated (flanged connections only)
    - Snap Action (gas/vapor service only) or
    - Modulating Action (non-compressor only)
- Lift Lever?  None  Open Lever  Closed Lever

- Threaded: \_\_\_\_\_
  - MNPT x FNPT  FNPT x FNPT
- Flanged: \_\_\_\_\_
  - RF x RF  RTJ x RF  RTJ x RTJ

## 2. Operating Data

- Operating Pressure: \_\_\_\_\_
- Set Pressure: \_\_\_\_\_
- Atmospheric Pressure: \_\_\_\_\_
- Allowable Overpressure : \_\_\_\_\_
- Back Pressures:
  - Constant Superimposed: \_\_\_\_\_
  - Built-up: \_\_\_\_\_

- Known Inlet Pressure Drop: \_\_\_\_\_
- Operating Temperature: \_\_\_\_\_
- Relieving Temperature: \_\_\_\_\_
- Compressor Service:  Yes  No

## 3. Fluid Data (fill only what applies)

- Does This Require Sour Service Trim?  Yes  No  NACE MR0175

❖ Gas/Vapor Name: \_\_\_\_\_

- Compressibility Factor Z: \_\_\_\_\_  
(Z = 1.0 if value is unknown)

- Molecular Weight: \_\_\_\_\_
- Ratio of Specific Heats: \_\_\_\_\_

❖ Liquid 1 Name: \_\_\_\_\_

- Required Relief Capacity: \_\_\_\_\_
- Density: \_\_\_\_\_
- Viscosity: \_\_\_\_\_

❖ Liquid 2 Name: \_\_\_\_\_

- Required Relief Capacity: \_\_\_\_\_
- Density: \_\_\_\_\_
- Viscosity: \_\_\_\_\_

- Required Relief Capacity: \_\_\_\_\_ or  
Orifice Size: \_\_\_\_\_
- or Specific Gravity: \_\_\_\_\_ (referenced to air)

- or Orifice Size: \_\_\_\_\_
- or Specific Gravity: \_\_\_\_\_ (referenced to water)

- or Specific Gravity: \_\_\_\_\_ (referenced to water)

## 4. Pilot Options (some option configurations may not be available for certain valve sizes)

- Backflow Preventer
- Auxiliary Filter (recommended for liquid)
- Pressure Snubber (not available on modulating)
- Field Test Connection
- Test Gag
- Manual Blowdown
- Remote Blowdown —  Pneumatic or  Electronic
- Remote Sensing



**THINK...MERCER FIRST®**