



# 6000 PSI UNLOADER VALVES MODELS 880 & 907

## GENERAL INFORMATION

Both the model 880 and 907 unloader valves use a low control pressure to shut off a high pressure line such as a compressor discharge. The control pressure could be low pressure shop air, air or gas from a compressor interstage line, or pressure generated by a compressor oil pump to mention a few possibilities. The primary use of these valves is to relieve pressure in compressor interstage and discharge piping when it is shut down so it can be restarted without a load. When control pressure to the valve is released, the valve opens. The model 880 is more sensitive than the 907 requiring only 15 PSI control pressure to close a 6000 PSI line. The model 907 requires 70 PSI.

The model 880 has a maximum control pressure rating of 500 PSI and care must be taken not to exceed this pressure at the control end of the valve. The model 907 will take control pressures as high as 5000 PSI without damage. The model 880 vents directly to it's surroundings via a drilled side port. The model 907 vent can be piped away via the 1/8" pipe thread side port. Both valves have internal filtration and over pressure protected soft seats to insure long term, bubble tight, reliable operation.

## SPECIFICATIONS

- Maximum rated pressure ..... 6000 PSI (40 MPa)
- Maximum control pressure
  - model 880..... 500 PSI
  - model 907 ..... 5000 PSI
- Minimum control pressure
  - model 880 ..... 15 PSI at 6000 PSI inlet  
10 PSI at 4000 PSI  
5 PSI at 2000 PSI
  - model 907 ..... 70 PSI at 6000 PSI  
50 PSI at 4000 PSI  
25 PSI at 2000 PSI
- Flow capacity
  - model 880 ..... Cv = .03 (.036" orifice)
  - model 907 ..... Cv = .06 (.06" orifice)
- Inlet filtration ..... 20 micron
- Materials
  - seals ..... KEL-F, nylon, Viton
  - body ..... anodized aluminum
  - internals ..... brass, stainless steel
- Ports
  - inlet ..... 1/4" male NPT
  - control ..... 1/4" male NPT
  - outlet
    - model 880 .... ambient direct
    - model 907 .... 1/8" female NPT
- Size ..... 1.5" dia. x 3.5" long



**Model 880**



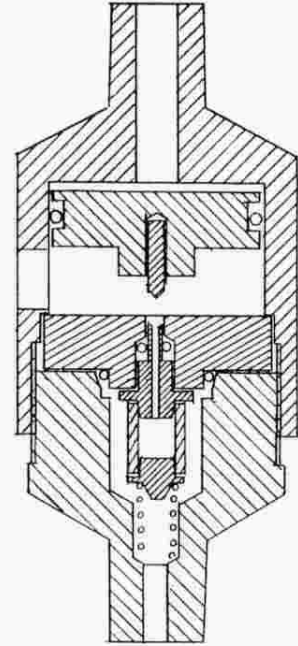
**Model 907**

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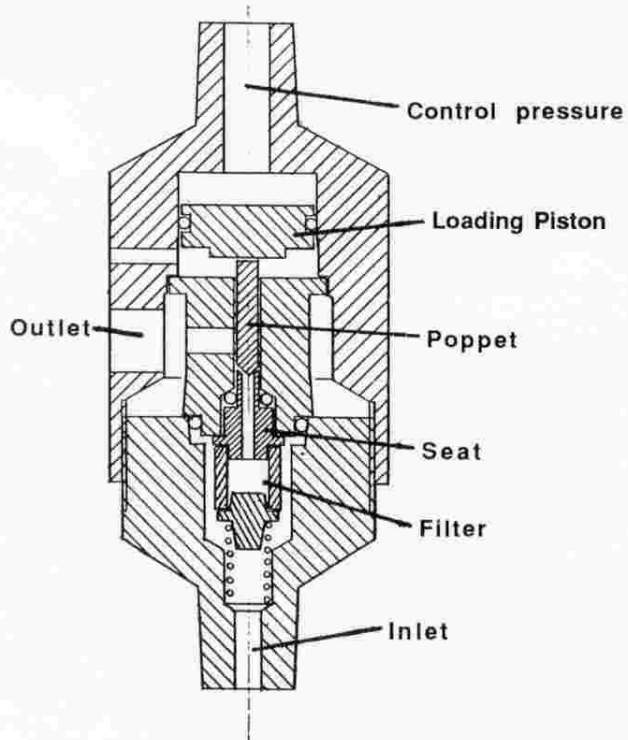
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## TYPICAL APPLICATIONS

- Unload high pressure compressor interstage and discharge lines upon shut down
- Automatic condensate drains for compressor separators
- Control of high pressure lines using low pressure air and inexpensive low pressure solenoids
- Numerous other control and logic functions
- Process industry control of liquids and gases
- Air tank fill stations



Sectional view, model 880



Sectional view, model 907

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