CPI Poppet Valves

Best suited for low differential pressures and slower speed compressors, poppet valves by CPI, part of the Howden group, are high lift valves with low pressure drop across the sealing elements. Each valve is individually custom designed to match specific compressor operating conditions for the application. CPI poppet valves are adaptable to existing plug style unloaders or supplied with new systems.

DESIGN FEATURES

- Poppet sealing elements in PEEK and Nylon material
- Seats and guards are offered in Ductile Iron and 4140 alloy steel for standard valves and in 17-4 stainless steel for corrosive applications
- Springs are offered in chrome silicon and Hastelloy C materials
- Available in single deck, deck-and-a-half, and double-deck configurations
- Smooth, streamlined flow through the seat for maximum efficiency
CPI Poppet Valves

FEATURES

- Effectively used where debris or liquid are present
- Low valve losses
- Standardization of poppet design and part numbers allows a reduction in component inventory (same poppet can be stocked for multiple stages of valves)
- Capable of operating across a wide range of parameters, including:
  - temperatures up to 200°C/390°F
  - pressures up to 170 bar/2500 psi
- Low risk of valve performance loss: generally, failure of a single poppet element is not as critical as with other valve types (concentric rings, ported plates)
- Custom spring design for each application to optimize opening and closing times
- Easily maintained and reconditioned
- Suitable for:
  - both lubricated and non-lubricated compressors
  - sour gas applications
  - compressor speed up to 500 RPM

CPI provides comprehensive compressor valve performance analysis.