

LP-Reliefclean

The Pressure Relief System for low pressures that cleans the exhaust gas

The LP-Reliefclean pressure relief system meets the new demands for pressure relief at very low pressures with exhaust & odour management, automatic perfect resealing after a relief event without operator intervention and minimum process interruption.

LP-Reliefclean is a modern development of a classic, proven design that provides the enhancements needed to meet the environmental demands of today.

The features provide by the LP-Reliefclean system are:

- ★ Automatic perfect self-resealing system
- ★ No operator intervention required
- ★ Accurate, consistent pressure relief setpoint
- ★ Pressure relief setpoints achievable down as low as 10 mBar.g
- ★ Setpoints up to 250 mBar.g or even higher
- ★ Gas release can be treated to manage odours
- ★ Gas release can be treated to minimise environmental issues
- ★ Process flow turndown in excess of 1000:1 achievable
- ★ Capable of handling two-phase flow of gas with liquid entrained
- ★ Low maintenance
- ★ Capable of handling gas with solids entrained
- ★ Meets API 521 and API 537 standards



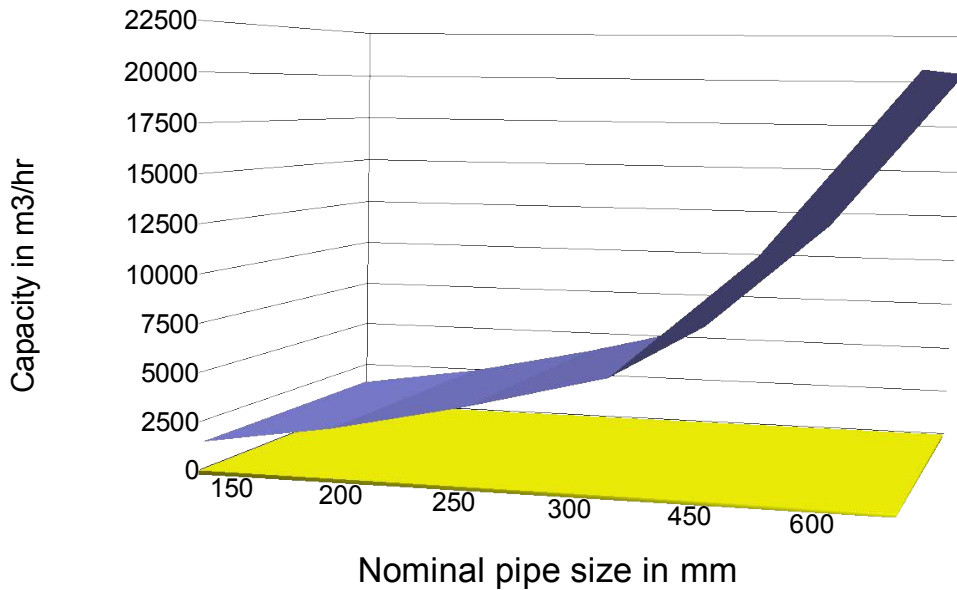
Conventional systems struggle to provide pressure relief for low pressure setpoints and as the setpoint gets lower on conventional relief systems the tolerance gets even wider. Hence the conventional bursting discs' lowest normal setpoint is typically 100 mBar with an actual relief point anywhere between 90 mBar and 115 mBar. By contrast the LP-Reliefclean system can provide pressure relief at 100 mBar +/- 1.5 mBar giving an actual pressure relief setting between 98.5 mBar and 101.5 mBar..... yet better still the LP-Reliefclean system can provide pressure relief setpoint as low as 20 mBar +/- 1.5 mBar and can provide even lower pressure relief setpoints if required.

Model Number	Process Connection flange size mm N.B.
LPRc-4	100
LPRc-6	150
LPRc-8	200
LPRc-10	250
LPRc-12	300
LPRc-18	450
LPRc-24	600

Better still the LP-Reliefclean pressure relief can be supplied with a chemical dosing system to manage any odours or treat any release to reduce the environmental impact of any pressure relief any event. It is the first pressure relief system that can provide gas and odour treatment during a release.

LP-Reliefclean: Advanced pressure relief systems for a modern world environment.

Nominal capacity at 10 mBar over relief setpoint



Standard vessel sizes are available and larger or smaller vessels can be designed and constructed to accommodate special process demands. The capacities of the standard vessel sizes are shown on the graph showing the nominal relief capacity at 10m Bar gas pressure above the relief setpoint. Higher capacities are realized with higher process gas pressure. The values shown are affected by the options selected and the actual density and viscosity of the gas. The values shown are for air at sea level.

The LP-Reliefclean can be provided in Stainless Steel or in GRP. Material selection is dependent upon the treatment chemicals that are in solution within the vessel as well as any anti-contaminant requirements for the process gas. The exhaust process gas is treated as it is passing through the LP-Reliefclean by bubbling through the selected solution. As the gas contacts the treatment solution so it reacts with the gas and removes the odour or other undesirable property.

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Technical data: Process connection size range from 100 mm NB upwards
 Minimum normal pressure relief setpoint 20 mBar.g
 Maximum normal pressure relief setpoint 200 mBar.g
 Process flow turndown 1000:1
 Materials of construction: GRP or Stainless-Steel to order

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