Emergency Relief Valve PROTEGO® ER-V-LP

New Development for Low Pressure Settings up to + 3.4 mbar



Challenge

In an emergency – e.g. in a fire or in case of malfunction – it may become necessary for the extraordinarily high, suddenly occurring venting requirements to be met through the PROTEGO[®] ER-V-LP emergency relief valve. At the same time, there is the objective to minimize emission losses. The valves of PROTEGO[®], given the 10% technology applied, guarantee both a safe function and extremely low emission losses at the lowest practical set pressures.



fig. 1: typical protection of a storage tank for gases liquefied under cryogenic conditions

Fields of Application

- Used where the overpressure relief valves designed for normal operation fail to satisfy suddenly occurring venting requirements (Fig. 2).
- Used as an emergency pressure relief valve on storage tanks, vessels, silos, and process engineering equipment in the event of a fire (Fig. 2).
- Used with tank inert gas blanket systems to relieve excess gas in case of malfunction (Fig. 2).
- Used on tanks storing gas liquefied under cryogenic conditions so that - in the event of leakage in the product tank, gases resulting in the insulated tank are quickly relieved through the emergency relief valve (Fig. 1).



fig. 2: Tank protection by PROTEGO® VD/SV-PA pressure and vacuum relief valve, PROTEGO® ZM-R nitrogen control valve and PROTEGO® ER-V-LP emergency relief valve

for safety and environment

PROTEGO

PROTEGO[®] ER-V-LP feature persuasive quality and reliability

Features

- Patented valve pallet technology (EP 2 420 708) with metal-to-metal seal-tight features.
- Guaranteed excellently tight sealing; hence, least possible product losses and reduced impact on the environment.
- 10% Technology for minimum pressure increase until full lift.
- Set pressure close to the opening pressure; hence, best possible pressure management of the system.
- Low pressure range (+3.4 mbar through +15 mbar).
- High flow efficiency due to large opening crosssection (DN 200 / 8" through DN 700 / 28").
- Safely guided valve pallet.
- Valve pallet is guided within a closed system and, thus, protected from atmospheric exposure.
- Rugged body design.
- Suited for use in hazardous areas.
- Best technology for API tanks.





Construction and Design

- 1 Rugged body design with flange connection to ASME ISO, EN/DIN standards.
 - Valve pallet guided within a closed system.
- Patented valve pallet with metal-to-metal seal-tight features.

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