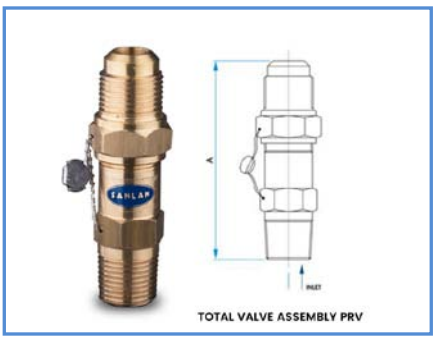
Straight Through Type Pressure Relief Valves



Introduction

'SANLAN' Straight Through Pressure Relief Valves are designed for installation on pressure vessels containing fluorinated refrigerants at temperature between – 40 F (-40 deg. C) and +225 F (+107 deg. C). These are installed for the purpose of preventing the pressure in the vessel from rising above a safe value when the vessel is exposed to excessive heat such as generated by fire.

In-line with the Institute of Refrigeration Guidelines (UK), it is recommended that a PRV should be replaced at least every 5 years.

Technical Information

Pressure Relief Valve may be set at pressures up to, but not to exceed to design working pressure of the vessel. Where system conditions permit, it is recommended that the relief valve be set at the design working pressure of the vessel. To prevent relief valve discharge during normal system operation, it is desirable to have the design working pressure of the vessel and the relief valve setting 25% higher than the maximum operating pressure of the system. The discharge capacity required is based on the size of the vessel and the refrigerant used. The discharge capacity of relief valves varies with the pressure setting. The capacities of 'SANLAN' pressure relief valves at various pressure settings are shown in the table.

Installation

- Connect the relief valve directly to the pressure vessel at a location above the liquid refrigerant level.
- Stop valve shall not be located between the vessel and the relief valve.
- The discharge from the relief valves shall be vented to the outside of the building in an approved manner.
- Thread sealing compounds used to install relief valves should be applied with care to external threads only. Avoid getting compound into the relief valve inlet.
- Do not apply heat to the relief valve by welding or brazing the connection.
- Valve must remain replaceable.
- GDO not discharge the relief valve prior to installation or when pressure testing the vessel.

Important:

Relief valves are designed to function as safety devices. After they have discharged, relief valves are designed to reclose automatically at a predetermined pressure.

BUT

While the valve is discharging, foreign material can collect on the valve seat disc. This makes it almost impossible to predict, with any degree of certainty, the relief valves to reseal tightly.

AS SUCH, IT IS ALWAYS RECOMMENDED THAT ONCE A VALVE RELIEVES, IT SHOULD BE REPLACED.

Specifications

Kindly refer the following table to select the proper pressure relief valve as per the requirement

Type	Connection Size		A	Orifice Dia.	Weight	Capacity (Pounds of Air per Minute) At Pressure Setting-PSIG.						
	Inlet	Outlet	Inches	Inches	Lbs	150	200	235	300	350	400	450
PRV 38	3/8"MPT	3/8"FL	3.16	0.25	0.39	5	6.6	7.6	9.6	11.2	12.7	14.3
PRV 12	1/2"MPT	5/8"FL	3.58	0.25	0.85	8.3	10.8	12.7	16	18.6	21.1	23.7
PRV 34	3/4"MPT	3/4"FPT	3.74	0.38	1.03	18.5	25.3	28.2	35.5	41.2	46.8	52.5
PRV 1	1"MPT	1"FPT	4.16	0.5	1.46	33.2	43.4	50.6	63.8	74	84.2	94.4
PRV 1D	1"MPT	1"FPT	4.65	0.71	1.9	59.5	77.2	89.7	112.8	130.7	148.6	166.4
PRV 1-1/4D	1 1/4"MPT	1 1/4"FPT	4.65	0.71	1.94	59.5	77.2	89.7	112.8	130.7	148.6	166.4

Note:

1. **Relief Valves of any pressure setting between 150 PSI to 450 PSI can be supplied on request.**

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