

## Pressure Relief Assembly

### **Purpose:**

The primary function of the pressure relief assembly is to protect the gas outlet pipeline of vaporizers from leaking due to overpressure. By rupturing a pre-set disc, the chemical can flow into the assembly and open the pressure relief valve to vent the gas to a safe location if the pressure reaches 560 psig. Pressure relief assemblies are available for chlorine, sulfur dioxide and ammonia chemical lines.



### **Included:**

- Rupture disc and holder
- Diaphragm protected pressure switch (and optional gauge)
- Pressure Relief Valve
- Piping and fittings

### **Specifications:**

Piping is made from 1" schedule 80 seamless carbon steel pipe, A-106, Grade B. Fittings are made from 3000 pound forged carbon steel, A-105.

Rupture disc holder shall be of flanged type, or union type (*pictured*) upon customer request and shall have a rupture disc set to 400 psig at 72 °F. All rupture disc and holders shall be ASME certified.

A diaphragm protected pressure switch shall be installed downstream of the rupture disc for remote indication of a burst disc. This switch shall be factory set at 40 psig (2.75 barg).

Pressure Relief valve shall have a 1" MNPT inlet and 1.5" FNPT outlet. Relief pressure is factory set at 560 psig. Vent piping shall be seamless schedule 80 carbon steel pipe, A-106 and shall slope downward and include an insect screen.

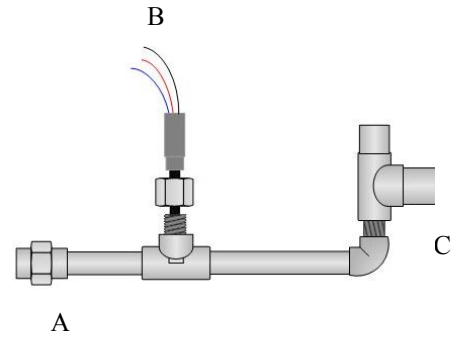


# Pressure Relief Assembly

Pressure Relief Valve Assembly for Chlorine/ Sulfur Dioxide Piping

Model NRDPRV- \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - IS

A      B      C



Position	Feature	Description
<b>A. Rupture Disc Assembly</b>	1	<b>RDH-100</b> 1" NPT union type holder with <b>RD-400</b> Silver rupture disc (400 psig @ 72°F), vacuum support, ASME certified. (Fike)
	2	<b>RDH-100</b> 1" NPT union type holder with <b>RD-338</b> Silver rupture disc (338 psig @ 72°F), non-fragmenting disc, vacuum support. ASME certified. (Fike)
	3	<b>RDH-200</b> 1" NPT flanged holder with <b>RD-300</b> Tantalum rupture disc (300 psig @ 72°F), non-fragmenting, can handle vacuum, ASME certified. (Continental).
<b>B. Pressure Switch</b>	1	<b>PSL-UECL2-EW</b> Pressure switch with Tantalum diaphragm protector, 1 adjustable switch 25-65 psig range and over-pressure rated to 600 psig, proof pressure 1000 psig.
	2	<b>DPGS-A-EW</b> 3.5" pressure gauge (0-600 psi) with 0-100 psi adjustable pressure switch. 2000 psi proof pressure, 9500 psi burst. Tantalum diaphragm protector.
	3	<b>DPGS-V12-EW</b> Digital pressure gauge with switch. 0-600psig.
<b>C. Pressure Relief Valve</b>	1	<b>PRV-560-2850H</b> 1" MNPT inlet and 1.5" FNPT outlet, Carbon Steel inlet and body with 316 SS internals. Pressure relief set at 560 PSI. (See note 3)

*Other Configurations Available Upon Request. Contact Hydro Instruments For More Information.*