

SECTION 4.5_KSEPW

SEMI LIQUID SEAL EMERGENCY PRESSURE RELIEF VALVE

(1) INTRODUCTION

The model KSEPW is designed to provide emergency pressure relief for storage tanks when exposed to overpressures that are not handled by standard tank vents. These vents provide the capacity to meet API standard 2000 for emergency venting due to fire exposure when properly sized. And it provides quick easy access for tank inspection and maintenance.

And also designed to be Cushioned Air Seating, Teflon(FEP+PTFE) diaphragm are standard.

The excessive pressure over 75% of set point builds up to 90% of set point, the Liquid (Silicon oil) catch up the Leakage and meet bubble tight (no leakage) at 90% of set pressure. It is designed to be self closing under normal operation by inside GUIDE and the restraining cables to connect the Cover A'ssy and Flange.

Setting Pressure

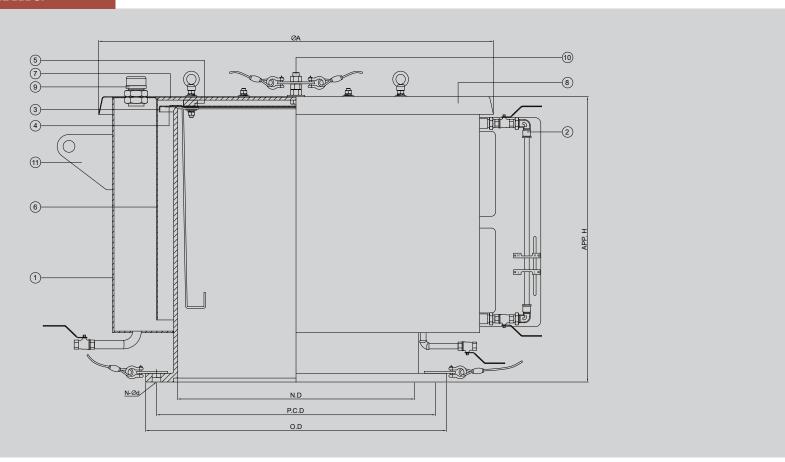
KSEPW Permernent Setting Min. 50 mmW.C ~ Max. 700 mmW.C

- © **BOdy Materials** Carbon Steel, SS304 and SS316 with various trims (Different materials available on request)
- (Different connections available on request)
- Rules & Certifications API 2000
- **(iii) Optimum / Optional Design & Arrangments** Steam jacket type, Proximity type





COUTLINE DRAWING



III DIMENSION TABLE

| SIZE | | 16" | 20" | 24" |
|--------|-----------|---|-------------------|-------------------|
| N.D | | 400 | 500 | 600 |
| ØA | | 800 | 920 | 1000 |
| O.D | API 650 | - | 650 / 660 | 750 / 762 |
| | ASME 150# | 595 | 700 | 815 |
| P.C.D | API 650 | - | 596.9 / 590 / 597 | 698.5 / 690 / 699 |
| | ASME 150# | 539.7 | 635 | 749.3 |
| N-Ød | API 650 | - | 16-Ø19/16-Ø20 | 20-Ø19/20-Ø20 |
| | ASME 150# | 16-∅29 | 20-Ø32 | 20-Ø35 |
| Арр. Н | MIN. | 450 | 450 | 500 |
| | MAX. | The higher setting pressure, the higher KSEPW's height to be designed | | |

 $\textbf{NOTE} \ \ \text{Certified dimensions available upon request (STD: API650)}.$

COMPONENT MATERIAL

| ITEM NO | COMPONENT | BODY | CARBON STEEL | SS304 | SS316 |
|------------|----------------|------|-----------------|-------------|--------------|
| | | TRIM | SS304 | SS304 | SS316/SS316L |
| 1 | BODY | | CARBON STEEL | SS304 | SS316 |
| 2 | LEVEL GAUGE | | SS304 + PFA | SS304 + PFA | SS316 + PFA |
| 3 | DISC | | SS304 | SS304 | SS316L |
| 4 | DIAPHRAGM | | FEP+PTFE (NOTE) | | |
| 5 | BASE RING | | CARBON STEEL | SS304 | SS316L |
| 6 | INSIDE COVER | | CARBON STEEL | SS304 | SS316L |
| 7 | LOADING WEIGHT | | CARBON STEEL | SS304 | SS316L |
| 8 | WEATHER HOOD | | CARBON STEEL | SS304 | SS316L |
| 9 | OIL CAP | | CARBON STEEL | SS304 | SS316 |
| 10 | BOLT/NUT | | SS304 | SS304 | SS316 |
| 11 | LIFTING LUG | | CARBON STEEL | SS304 | SS316 |

NOTE Other materials are available upon request.