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| Athlon Bayport, TX | | Date: 10/29/19 Revision: A | Created By: CJM Checked By: |
| GENERAL INFORMATION | | COMMENTS | |
| Item No. and Tag | PSV-XX2 | | |
| Relieves Equipment No. | E-778 Shell Side | | |
| Valve Location (P&ID #) | SK-19282010-001 Rev.A | | |
| Manufacturer | Emerson Crosby | | |
| Relief Valve Model No. | JOS-H-E | | |
| Relief Valve Serial No. | New Valve For Purchase | | |
| SERVICE CONDITIONS | | | |
| Design Code (ASME, DIN etc.) | ASME Sec. VIII | | |
| Fluid | Steam | | |
| Fluid State (Liquid, Vapor, or Liq/Vap) | Vapor | | Operating Relieving |
| Required Capacity & Units | 1,836 lb/hr | lb/hr | |
| Molecular Weight | 18.02 | lb/lbmol | |
| Specific Gravity at Flowing Conditions | 0.381 | | Gas density: 0.4673 lb/ft ³ |
| Viscosity at Relieving Temp, Cp | 0.016 | | |
| Compressibility Factor, Z | 0.9088 | | |
| Ratio of Heat Capacities, k | 1.196 | | |
| Design Pressure of Equip., MAWP psig | 165 psig | | |
| Operating Pressure, psig | | | |
| Set Pressure, psig | 165 psig | | |
| Temperature, °F | | 388 deg F | Operating Relieving |
| Constant Back Pressure, psig | 0 psig | | |
| Variable Back Pressure, psig | 0.75 psig | | Builtup Backpressure |
| Cold Differential Set Pressure, psig | N/A | | Atmospheric relief |
| Allowable Overpressure % | 21% | | |
| Blowdown % | | | |
| BASIS OF SELECTION | | | |
| Design/Sizing Basis | 15: Exterior Fire | | |
| Other Basis | | | |
| DESIGN DETAILS | | | |
| Design Type | Conventional | | |
| Bonnet (Open or Closed) | Open | | |
| Inlet Size, Rating, Facing | | | |
| Outlet Size, Rating, Facing | | | |
| Calculated Area, Sq In | 0.208 sq in | | Using ASME discharge coefficient |
| Orifice Letter Designation | E | | |
| Orifice Area, Sq In | 0.221 SqIn | | ASME Actual Area |
| MATERIALS | | | |
| Body | | | |
| Bonnet | | | |
| Seat and Disk | | | |
| Guide and Ring | | | |
| Spring | | | |
| Bellows | | | |
| ACCESSORIES | | | |
| Lifting Lever (Plain, Packed or None) | | | |
| Code Stamp | | | |
| Cap (Screwed or Bolted) | | | |
| NOTES | | | |
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| Rev 1.29.1 | | | |