

| tyco Flow Control Anderson Greenwood Crosby | | Pressure Relief Valve Steam VIII Sizing and Selection Report | | | | | | |
|--|----------------------------------|--|---------------------------|--|----------------------------------|--|--|--------------|
| Stafford TX, USA 281-274-4400 281-274-4655 (Fax) | | Wrentham, MA, USA 508-384-3121 508-384-8675 (Fax) | | Market Harborough, UK 44-1858-467281 44-1581-434725 (Fax) | | Singapore, Singapore 65-6861-1655 65-6862-1778 (Fax) | | |
| Tyco Phone: Fax: | | | | Customer Information Project: Location: Contract: Spec Number: | | | | |
| P & ID | | | | Tag # | | | | Revision |
| Prpd. By | Chkd. By | | Apprd. By | | | | | Sheet 1 of 1 |
| General | Full / Semi Nozzle | | Full | | Fire Vessel Calculations | | | |
| | Safety or Relief | | Safety Relief | | Liquid Height | | | |
| | Valve Type | | Conventional | | Lat. Ht. Of Vaporization | | | |
| | Bonnet Type | | Closed | | Environment Factor | | | |
| Conn. | Inlet | Outlet | 2 | 3 | Tank | | | |
| | Flg Rtg / Screwed | | 150 | 150 | Orientation | | | |
| | Flg Facing | Flg Facing | RF 125-250Ra | RF 125-250Ra | Ground Clearance | | | |
| Materials | Body/Base | | SA216 WCB Carbon Steel | | Height / Length | | | |
| | Bonnet/Cylinder | | SA216 WCB Carbon Steel | | Diameter | | | |
| | Nozzle | | 316 Stainless Steel | | Vessel Heads | | | |
| | Disc/Seat | | 316 Stainless Steel | | Vessel Area | | | |
| | Spring | | Chrome Steel (= <650 F) | | | | | |
| Sizing Data | Code | Accum. | Section VIII | 10.0 % | Tag Notes | | | |
| | Sizing Basis | | Blocked Discharge | | | | | |
| | Fluid Name | | Steam | | | | | |
| | Fluid State | | Steam | | | | | |
| | Mol. Wt. | Comp. (Z) | 18.02 | 1.00 | | | | |
| | k (Cp/Cv) | C | 1.30 | | | | | |
| | Ksh | Kn | 0.974 | 1.000 | | | | |
| Kd | K | 0.865 | 0.961 | | | | | |
| Pressure (psig) | Operating | Set | 0.00 | 150.00 | Accessories Packed Lift Lever | | | |
| | MAWP | Design | | | | | | |
| | Inlet Loss | | | | | | | |
| | Rupture Disc CCF | | | | | | | |
| | Flowing Pressure | Differential Set | 179.70 (psia) | | | | | |
| | Builtup BP | | | | | | | |
| | Cons. Superimposed | | | | | | | |
| | Var. Superimposed | | | | | | | |
| | Total BP | Atm. PR. | 0.00 | 14.696 (psia) | | | | |
| Temp.(°F) | Op. / Rel. /Des. | 0 | 450 | | | | | |
| Flow Area (in²) | Calc. | Selected | | 1.453 | | | | |
| | API Orifice | | J | | | | | |
| Capacity (lb/hr) | Required | Rated | | 11,328.899 | Recommended Spare Parts: | | | |
| | Actual | | 12,587.666 | | | | | |
| Misc. | Reaction Force (lbf) | | 52.011 | | | | | |
| | Noise Level (db) @ 100 ft (30 m) | | 109.956 | | | | | |
| Valve | Model Number | | 2 J 3 JOS-E-15-D | | | | | |
| | Manufacturer | | Anderson Greenwood Crosby | | | | | |
| | Price | | | | | | | |
| | P.O. Number | | | | | | | |