

Specification Sheet

| <p>No.: 1 QTY: 1</p> <p>Tag no. 52-PRCA-101</p> <p>Service</p> <p>< Specification ></p> <p>Model VZZ</p> <p>Description Special Control Valves</p> <p>Valve size 5 inch</p> <p>Port size inch</p> <p>Rated Cv 70</p> <p>Connection size 5 inch</p> <p>Body rating TES 300K</p> <p>End connection DMF</p> <p>Body material TITANIUM</p> <p>Trim material Special Alloy</p> <p>Flow characteristic EQ%</p> <p>Bonnet type Radiation Mechanism</p> <p>Actuator DAP1000</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close) Side to Bottom</p> <p>Gland packing V7132Y</p> <p>Gasket V544(TITANIUM)</p> <p>Grease 400</p> <p>Air supply 4.9bar</p> <p>Spring range</p> <p>< Accesories ></p> <p>Positioner / Signal VPP03-1</p> <p>Explosion-proof Signal 3-15 psi</p> <p>Regurator INA-13-127-04</p> <p>Regulator 2</p> <p>Limit Switch Action</p> <p>Solenoid valve Action</p> <p>Power supply</p> <p>Others</p> | <p>Product no.:</p> <p><Option></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(304ss)</p> <p>SV0005-001 Copper free for fluid contact s</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0803-002 Liquid penetrant test(PT) by High pressure gas safe control law in Japan</p> <p>SV0805 Ultrasonic test(UT)</p> <p><Finish></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Salt resistant</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---------------|-----|-----------|-----------|------|-----------|-----|--|--|--|------|----------------|-----|--|--|--|------|-----------------|----|--|--|--|------|----------------|--|--|--|--|-----|-----------------|--|--|--|--|-----|-------------|-----|--|--|--|------|---------------|-----|--|--|--|-------|-------------------|-------|--|--|--|----------|-----------|--|--|--|--|----|-------|------|--|--|--|---|----------|------|--|--|--|-----|--------|----|--|--|--|----|---------------|-------|--|--|--|--|--------|--|--|--|--|---|--|---------------|------|--------------|------|------------------|------|-------------------|----|
| <p><Operating condition></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: left;">Urea Solution</th> <th style="text-align: left;">NOR</th> <th style="text-align: left;">MIN</th> <th style="text-align: left;">[FLASH]</th> <th style="text-align: left;">UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td>270</td> <td></td> <td></td> <td></td> <td>m3/h</td> </tr> <tr> <td>Inlet pressure</td> <td>230</td> <td></td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Outlet pressure</td> <td>20</td> <td></td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Diff. pressure</td> <td></td> <td></td> <td></td> <td></td> <td>bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td></td> <td></td> <td></td> <td>bar</td> </tr> <tr> <td>Temperature</td> <td>200</td> <td></td> <td></td> <td></td> <td>degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td>970</td> <td></td> <td></td> <td></td> <td>kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td>11.53</td> <td></td> <td></td> <td></td> <td>kg/m3[N]</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td></td> <td>cP</td> </tr> <tr> <td>Flash</td> <td>96.4</td> <td></td> <td></td> <td></td> <td>%</td> </tr> <tr> <td>Velocity</td> <td>5.92</td> <td></td> <td></td> <td></td> <td>m/s</td> </tr> <tr> <td>S.P.L.</td> <td>99</td> <td></td> <td></td> <td></td> <td>dB</td> </tr> <tr> <td>Calculated Cv</td> <td>26.52</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Travel</td> <td></td> <td></td> <td></td> <td></td> <td>%</td> </tr> </tbody> </table> | Fluid name | Urea Solution | NOR | MIN | [FLASH] | UNIT | Flow rate | 270 | | | | m3/h | Inlet pressure | 230 | | | | barG | Outlet pressure | 20 | | | | barG | Diff. pressure | | | | | bar | Shut-off press. | | | | | bar | Temperature | 200 | | | | degC | Sp.Gr. (liq.) | 970 | | | | kg/m3 | Sp.Gr.(gas,vapor) | 11.53 | | | | kg/m3[N] | Viscosity | | | | | cP | Flash | 96.4 | | | | % | Velocity | 5.92 | | | | m/s | S.P.L. | 99 | | | | dB | Calculated Cv | 26.52 | | | | | Travel | | | | | % | <p><Seat Leakage></p> <p><Note> Tokumi: V93-8894-02 - 02</p> <p>1. This proposal is for control valve only. Air failure close system and auxiliary units are not included in this proposal.</p> <p><Line spec></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td style="text-align: right;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: right;">degC</td> </tr> <tr> <td>Line size in/out</td> <td style="text-align: right;">inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: right;">mm</td> </tr> </table> | Design press. | barG | Design temp. | degC | Line size in/out | inch | Line Sch. / Thick | mm |
| Fluid name | Urea Solution | NOR | MIN | [FLASH] | UNIT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flow rate | 270 | | | | m3/h | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inlet pressure | 230 | | | | barG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Outlet pressure | 20 | | | | barG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diff. pressure | | | | | bar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shut-off press. | | | | | bar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature | 200 | | | | degC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sp.Gr. (liq.) | 970 | | | | kg/m3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sp.Gr.(gas,vapor) | 11.53 | | | | kg/m3[N] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viscosity | | | | | cP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flash | 96.4 | | | | % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Velocity | 5.92 | | | | m/s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S.P.L. | 99 | | | | dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calculated Cv | 26.52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Travel | | | | | % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Design press. | barG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Design temp. | degC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Line size in/out | inch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Line Sch. / Thick | mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |