GUJARAT GAS

# DATASHEET OF REGULATOR WITH INTEGRAL SSV

**Document No.: GGL/TS/DS/PRV/2021/001**

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## DATASHEET OF REGULATOR WITH INTEGRAL SSV

| Sr. No. | Technical Description | Specifications |
|---|---|---|
| **General** | | |
| 1 | Tag No. | Vendor to Furnish |
| 2 | Valve Inlet Size | 1'' |
| 3 | Valve Outlet Size | 1'' |
| 4 | Service | Pressure Regulator + Shut Off Valve at Over Pressure |
| 5 | Governing Standard | EN 334 |
| 6 | Type of Regulator | Direct Operating (self-actuated spring loaded) |
| 7 | Operation | Regulating the Downstream Pressure |
| **Service (To be selected from below as per the process parameters mentioned by the user)** | | |
| 8 | Fluid | Natural Gas |
| 9 | Flow Capacity | 5 to 100 scmh |
| 10 | Inlet pressure(Min/Max) | 2 to 4 barg |
| 11 | Outlet pressure | 1 barg |
| 12 | Design Pressure & Class | 150#- 19 Barg |
| 13 | Design Temperature | 150# : 0 to 65 ˚C |
| 14 | Set Point | Regulator: 1 Bar ; SSV- OPSO: 1.5 Bar g; UPSO: 0.7 Bar g. (Skid Set Point: 1 Bar g) |
| 15 | Operating Temperature | 150# : 0 to 50 ˚C |
| 16 | Accuracy (%) | 5 % |
| 17 | Lock up Class (SG) | 10 % |
| **Material of Construction (To be selected from below as per the process parameters mentioned by the user)** | | |
| 18 | Body Material | For 150# - ASTM A 216 Gr. WCB/WCC or Forged Body (LF2/Equivalent) |
| 19 | Valve Seat Material | ASTM A 479 Gr. SS 316 |
| 20 | Diaphragm Material | Nitrile Rubber |
| 21 | Trim, Plug Material | ASTM A 479 Gr. SS 316 |
| 22 | Other Wetted Parts | ASTM A 479 Gr. SS 316 |
| 23 | Impulse Connection & Material (If Applicable) | SS 316 |
| 24 | End Connection | Flange type, 125 AARH( As per ASME B16.5) |
| **Requirements** | | |
| 25 | Failure Position-Regulator | Fail to Open |
| 26 | Failure Position-Slam Shut off | Fail to Close |
| 27 | Limit Switch | NA |
| 28 | Pressure Indicator | NA |
| 29 | Spring Range (PRV/SSV) | 0.3 to 1.3 Bar g. **(or as per user requirement/process parameter/vendor to supply)** |
| 30 | Radiography | Not applicable |
| 31 | Face to Face Dimensions | Vendor to Furnish |

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|---|---|---|
| 32 | Leakage Class | VI |
| 33 | Hydrostatic Test | 1.5 * Design Pressure |
| 34 | Pneumatic Test | 1.1 * Design Pressure |
| **Valve Calculation** | | |
| 35 | Selected Cg | Within 10 - 80% of rated Cv for the calculation of min. Inlet & max. outlet flow OR as per manufacturer standard |
| 36 | Sound Level | Sound pressure levels shall be limited to the values prescribed by Environmental Authorities but in no case it shall exceed 70 dbA. |
| 37 | Limiting Velocity | Max 30 m/s or OEM recommendations |
| 38 | Differential Pressure | Maximum 0.5 barg |
| Note: | | |
| 1. Set point of the regulator shall be adjustable. Vendor shall furnish the adjustable range of the pilot. | | |
| 2. Accuracy of the pressure regulation shall be better than or equal to 5 % of the set pressure for the entire inlet pressure and flow range | | |
| 3. Regulator shall be sized to deliver the maximum flow at minimum pressure condition and the minimum flow at the maximum pressure reduction as per given regulator sizing sheet by GGL. | | |
| 4. The inlet pressure variation is possible for the entire flow rate and the PCV to be sized accordingly. | | |
| 5. Vendor shall provide and include the noise treatment with silencer / expander. | | |

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