

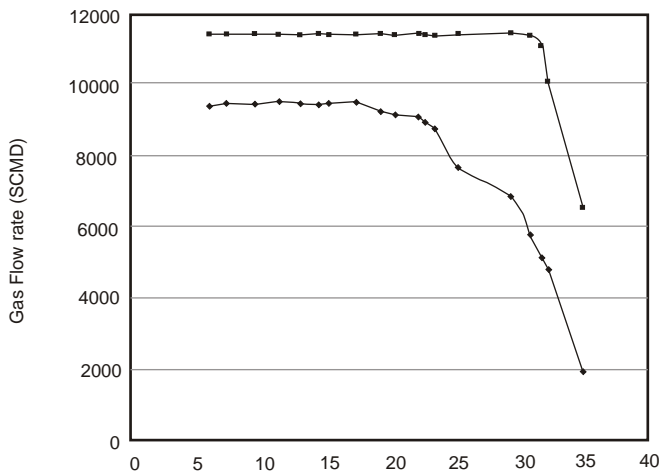


FLOW CHARACTERISTICS OF SUPER FLOW ORIFICE VALVE

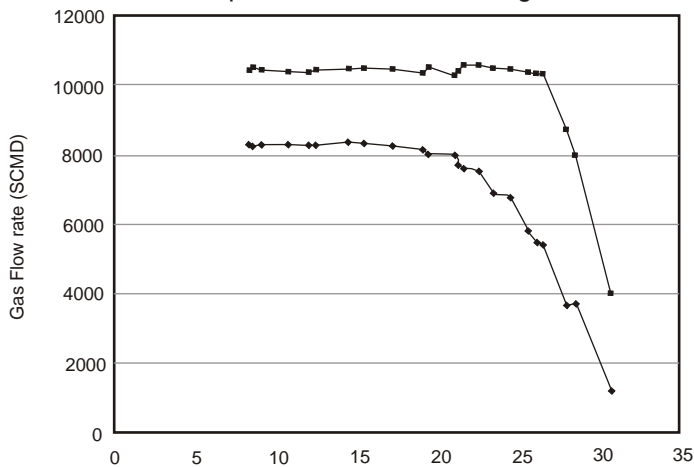
Parveen has Successfully developed after conducting extensive in house research Super Flow Orifice Valve which is a one step ahead of Conventional Orifice Valve available in the market. It's performance is dynamically tested by Institute of Oil & Gas Production Technology, ONGCL, Panvel, Mumbai, India.

Flow Performance Curve of NOM - 14R Orifice Valve (Port - 12/64") against different Upstream Pressures i.e. 30 Kg/cm² & 35 Kg/cm² are depicted below and comparison with Conventional Square Edge Orifice Valve are also shown below.

Flow Performance (NOM14-R, Port12/64")
Upstream Pressure - 35 Kg/cm²



Flow Performance (NOM14-R, Port12/64")
Upstream Pressure - 30 Kg/cm²



ANALYSIS OF RESULTS

- 1) The Critical Flow rate was achieved at approx 0.878-0.879 pressure ratio of Down Stream Pressure to Upstream Pressure i.e. at a pressure differential of 12% compared to almost 50% in case of a Standard Orifice in Conventional Orifice Valve.
- 2) The Actual Critical Flow rates obtained through the testing were approximately 20% higher than the calculated theoretical flow rates.