

WIRELINE RETRIEVABLE SUPER FLOW ORIFICE VALVE

PARVEEN 1" & 1- 1/2" OD wireline retrievable injection gas lift super flow orifice valves are used for continuous flow application. These are designed for circulating operations and provide a means of flow from casing to annulus through orifice and then into the tubing.

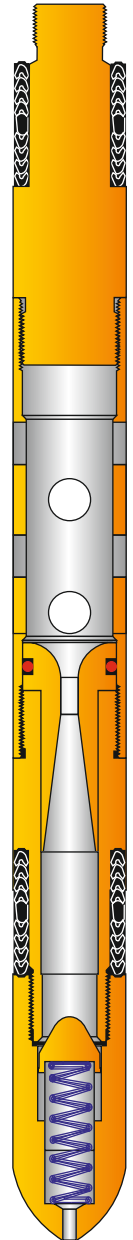
OPERATION

Super flow orifice valve utilizes an orifice venturi as well as a back check valve for continuous flow operations. Injection fluid enters through the entry ports and then flows through orifice venturi. Injection pressure moves the back check valve off the seat & thus allowing fluids to enter into the tubing. Reverse flow pushes the check valve on seat to prevent flow into the casing.

FLOW CHARACTERISTICS OF SUPER FLOW ORIFICE VALVE

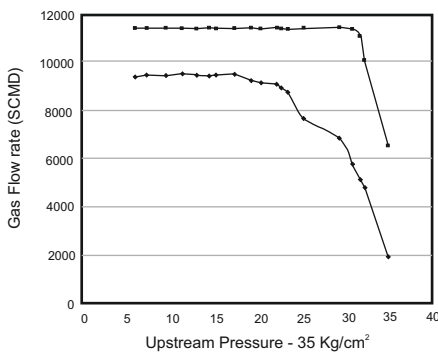
PARVEEN has successfully developed after conducting extensive in-house research the Super Flow Orifice Valve which is one step ahead of Conventional Orifice Valves available in the market. Its performance is dynamically tested by Institute of Oil & Gas Production Technology, ONGCL, Panvel, Mumbai, India.

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.

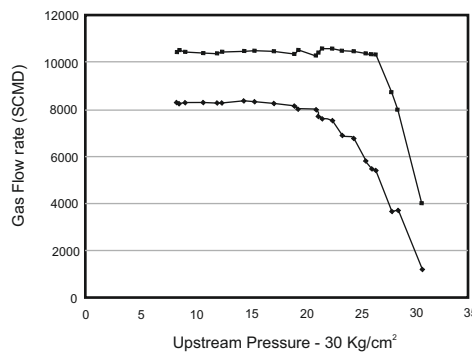


**RETRIEVABLE
SUPER FLOW
ORIFICE VALVE**

Flow Performance (NOM14-R, Port12/64")



Flow Performance (NOM14-R, Port12/64")



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 a Conventional Orifice Valve.

2) The Actual Critical Flow rates obtained through the testing were approximately 20% higher than the calculated theoretical flow rates.

ENGINEERING DATA FOR RETRIEVABLE SUPER FLOW ORIFICE VALVE

Type	Assy. Number	Nominal O.D. in.	Packing O.D. in.		Port Size in.		Latch or End Conn.	Running Tool Type	Pulling Tool Type	Mandrel Type
			Upper	Lower	Min.	Max.				
NOM 14R	N150-04	1	1-1/32	1-1/32	1/8	5/16	BK-2,M	MR	MP	TMP
NO 20R	N150-12	1-1/2	1-9/16	1-1/2	1/8	51/64	TG,RK,RM	RTG, TER	PTG, TRP	TP