

## INJECTION PRESSURE OPERATED GAS LIFT VALVE

#### **DESCRIPTION**

PARVEEN N Series Valves utilize a nitrogen charged dome and bellow configuration designed for either continuous or intermittent flow applications. These are especially suitable for use as unloading and operating valves in areas where high gas lift pressures are available. Since the charge pressure above the bellows is affected by temperature, it is important that the operating temperatures at the valve be known. These valves are available in both wireline-retrievable and conventional installations.

#### **BENEFITS**

Vibration protected, 3-ply monel bellow are designed to withstand hydrostatic pressure up to 5000 psi

Nitrogen dome charge, acting on the O.D. of the bellow, permits bellows to expand uniformly without stacking, thus prolonging bellow's life.

The multiple port size availability, makes this valve series appropriate for a wide range of operating conditions.

Reversible seat is also available in several different materials.

### **OPERATING PRINCIPLE**

The dome nitrogen charge applied to the external area of the bellows provides the downward force, holding the valve on its seat. This dome pressure is preset at the reference temperature and corrected to operating temperature. The opening forces on the valve are the casing pressure acting on the internal area of the bellows (less the area of the seat) and the tubing pressure acting on the seat area. When the combined casing and tubing pressures are sufficient, the valve opens. Once the valve is open, it remains open until the casing pressure is reduced to the predetermined closing pressure. The spread (the difference between opening and closing casing pressure) is controlled by the tubing sensitivity of the valve. The larger the seat port area, the more tubing sensitive the valve is.



## PARVEEN HIGH PRESSURE GAS LIFT VALVE (1-1/2" OD Type N90H & N90RH)

PARVEEN High Pressure Gas Lift Valve incorporates the concept of piston cylinder in the true sense, which was not present in old Gas Lift Valves available in the market. Bellow is protected in this new design against deformation and remains not only straight but its coil is also not over stressed against high pressure. Due to this the bellow's life gets increased and valve functions in a predetermined manner.

ENGINEERING DATA FOR INJECTION PRESSURE OPERATED VALVES										
TYPE	ASSY. NO.	NOMINAL OD	PACKING OD (INCH)		PORT SIZE (INCH)		LATCH OR END CONN.	RUNNING TOOL	PULLING TOOL	MANDREL TYPE
		(INCH)	UPPER	LOWER	MIN	MAX		TYPE	TYPE	
N-90	122-10XX-XXX-XO	1-1/2	-	-	1/8	1/2	1/2" NPT	_	-	SERIES 15
N-90H	122-11XX-340-00	1-1/2	-	-	1/8	1/2	1/2" NPT	-	-	SERIES 15
N-90R	122-10XX-XXX-X1	1-1/2	1-9/16	1-1/2	1/8	1/2	TG, RK, RM, T-2	RTG, TER	PTG, TRP	TP, MM, MMA, MMG
N-90R(H)	122-11XX-320-01	1-1/2	1-9/16	1-1/2	1/8	1/2	TG, RK, RM, T-2	RTG, TER	PTG, TRP	TP, MM, MMA, MMG
NM-90	122-20XX-XXX-XO	1	-	-	1/8	3/8	1/2" NPT	_	-	SERIES 12
NM-90R	122-20XX-XXX-X1	1	1-1/32	1-1/32	1/8	3/8	BK-2, M	MR	MP	TMP, KBM, KBMG, KBG
PBK-1	122-90XX-XXX-X1	1	1-1/32	1-1/32	1/8	3/8	Integral Bottom	GA-2	MP	TMP, KBM, KBMG, KBG



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