



- TESTING:**  
 STANDARD TEST: - EACH VALVES IS TESTED WITH NITROGEN AT 1000 PSI FOR SEAT & PACKING LEAKAGE, WITH A MAX. ALLOWABLE LEAK RATE OF 0.1 SEC. / MIN.  
 HYDRO TEST: - PERFORMED WITH PURE WATER AT 1-1/2 TIMES OF THE WORKING PRESSURE.
- LUBRICATION:**  
 MOLLY ANTI- SEIZE LUBRICANT.
- NOTES:-**
- OPTIONAL GRAPHOIL PACKING BELOW THREADS AVAILABLE FOR HIGH TEMPERATURE APPLICATION. PANEL NUTS OPTIONAL.
  - END CONNECTIONS AVAILABLE IN MALE OR FEMALE BSP, BSPT & NPT THREADS IN ANGLE OR STRAIGHT PATTERNS.
  - PACKING BELOW THREADS / BACK SEATING ARRANGEMENT.
  - DIMENSIONS ARE FOR REFERENCE ONLY. SUBJECT TO CHANGE.
  - VALVE CAN BE SUPPLIED TO MEET CURRENT REVISION OF NACE MR-01-75. (SOURGAS SERVICE)

12	DUST CAP	1	PLASTIC LD.
11	LOCK PIN	1	A276-316/A-105
10	HANDLE	1	A276-304/A-105
9	GRIB SCREW	1	STEEL
8	LOCK NUT	1	A479-316/A-105
7	SPINDLE	1	A276-316 + STELLITED
6	PACKING WASHER	1	A276-316/A-105
5	PACKING	1	PTFE / GRAPHOIL
4	WASHER	1	A276-316/A-105
3	GLAND RETAINER	1	A479-316/A-105
2	GLAND BODY	1	A479-316/A-105
1	BODY	1	A479-316/A-105
S.NO.	DESCRIPTION	QTY.	MATERIAL

**MATERIAL OF CONSTRUCTIONS**

**TABLE OF DIMENSIONS:**

P-NPTM	P1-NPTF	L	H-HEX	A-OPEN	ORIFICE	Cv	Pr. Rot.	Temp. Rot.
1/4"	1/4"	60	25	92	4.8 mm.	0.85	6000 PSI (41300 kpa)	-20 to 250° F (-29° to 121°C)
3/8"	3/8"	60	25	92				
1/2"	1/2"	80	32	98	6.4 mm.	1.40		
3/4"	3/4"	80	36	114				

**TECHNICAL DATA**

TITLE: - NEEDLE VALVE - "HB Series" MF

DRN.	CDC	SCALE	N.T.S.
CHD.	ET	DATE	03.01.2002
APPD.	JP	DRG.NO.	PNV-H-S--MF

**PANAM ENGINEERS**  
 AN ISO 9001 : 2000 COMPANY  
 MUMBAI - INDIA