

## PRODUCT DATA SHEET

## QUIET OPERATION HIGH DENSITY INTERFACE (HDI) 3-WAY SOLENOID VALVE

The Lee Company continues its expansion of the High Density Interface (HDI) solenoid valve platform by offering a design that is optimized for quiet operation. A typical solenoid valve has an inherent clicking sound when energized, which is caused by the metal-to-metal contact of the moving armature and stationary core. This new quiet operation design uses "whisper" technology to achieve patient comfort. "Whisper" technology significantly reduces actuation noise by 50%, providing a sound level measurement of less than 37 dBA when measured at a distance of 24 inches and a valve cycle frequency of 10 Hz. Reference table below for relative sound pressure levels.

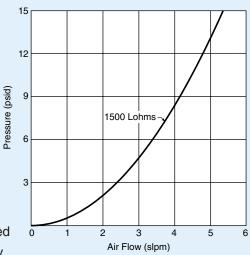
The quiet operation HDI is ideal for medical applications flowing gas or air, such as dialysis machines, patient monitors, ventilators/respirators, and other bedside medical devices.

Contact your Lee Sales Engineer for additional technical assistance and application information.

- "Whisper"
  Technology
- Compact Size
- Operating
  Pressure Range:
  Vac 45 psig
  (0-15 psid)
- Flow Capacity (air): 3-Way; 1500 Lohms (4.4 SLPM @ 10 psig; Cv = .013)
- Light Weight: Less Than 4.5 grams
- Leakage: Less Than 50 µL/min @ 5 psig (air)
- Electrical Connection: 0.025" Sq. Pin
- Operating Temperature Range: 40°F to 120°F
- Life Expectancy: 250 Million Cycles
- Three Mounting Styles: Face Mount, Plug-In and Ported
- 50% Quieter Than Our Already Best In Class HDI Design



# FLOW PERFORMANCE CHARACTERISTICS (Discharge to Atmosphere)



STYLE	LEE PART NUMBER	VOLTAGE (VDC)	WETTED MATERIALS
Plug-in	LHDA0561215H		
Face Mount	LHDA0571215H	5*	PPA, PBT, 316SS, 430F SS, FKM, Damping Fluid** and Epoxy
Ported	LHDA0581215H		Damping Fluid and Epoxy

### **SOUND PRESSURE LEVEL SCALE (dBA)**

THRESHOLD	QUIET OFFICE	ORDINARY	PASSING BUS OR TRUCK AT 10 FT.	THRESHOLD
OF HEARING	INTERIOR OR WATCH TICKING	CONVERSATION	OR FOOD BLENDER AT 3 FT.	OF PAIN
0	30	60	90	

<sup>\*</sup> Other voltages available upon request.

See dimensional drawings on reverse.

THE LEE COMPANY, 2 PETTIPAUG RD., P.O. BOX 424, WESTBROOK, CT 06498-0424

Tel: 860-399-6281

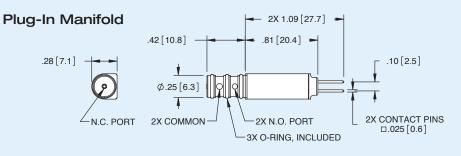
Fax, Order Entry: 860-399-7058

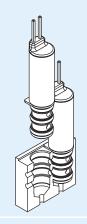
Fax, Technical Information: 860-399-7037

Web: www.TheLeeCo.com

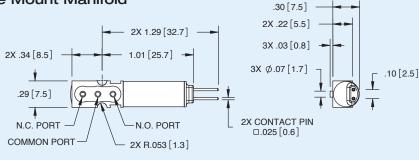
<sup>\*\*</sup> Synthetic hydrocarbon fluid

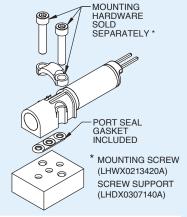
### **QUIET OPERATION SOLENOID VALVE**





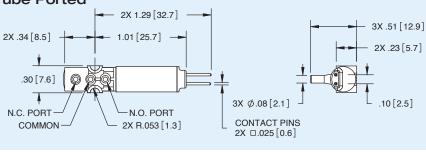


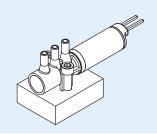




### **Soft Tube Ported**

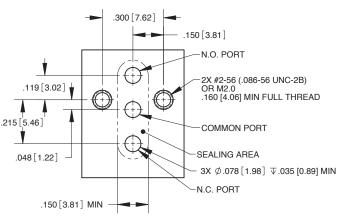
PART NO TTTA0000180B





#### .284 7.21 ALIGNMENT SLOT Plug-In Ø.268 [6.81] **Boss Detail** $\phi$ .251 $\begin{bmatrix} 6.38 \\ 6.35 \end{bmatrix}$ 0[0.00] .020 [0.51] MIN 0 [0.00] VALVE FLANGE DATUM SURFACE N.O. PORT INTERSECTION AREA .013 [0.32] .093 [2.36] N.O. PORT .165 [4.19] .130 [3.30] C/L Ø.063 MAX .240 [6.10] COMMON PORT .280 [7.11] C/L .319[8.10] Ø.063 MAX COMMON PORT INTERSECTION AREA 5X R.020 [0.51] .430 [10.92] N.C. PORT .470 [11.94] MIN .470 [11.94] C/L N.C. PORT INTERSECTION AREA Ø.242 [6.15] VALVE BOSS MAY BE CREATED USING (C) DRILL LEE CO. CUTTING TOOL 2X Ø.266 [6.76] **→** Ø .003 A

### **Face Mount Boss Detail**



NOTE: Boss detail drawings not to scale.

PDS 105 8/10

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