

ULTRA MINIATURE LATCHING 2-PORT NORMALLY CLOSED HIGH DENSITY INTERFACE (HDI) SOLENOID VALVE

The Lee Company's ultra-miniature 2-port normally closed solenoid valve is now available in a magnetically latched design. Optimized for applications that demand ultra-low power, low heat and small size, this design is ideal for compact, battery powered instruments.

In today's culture, the persistent demand for reliable and innovative products compels companies to integrate new and more advanced technology into smaller, lighter weight and more portable packages. Systems must be comprised of low power components in order to meet battery life demands, thus making our ultra-miniature latching valve the perfect candidate for your low power solenoid valve needs. Further to this point, the valve requires only momentary (10 to 30 ms) pulses of current to switch to and remain in each state. The polarity of voltage on the terminal pins controls the switched position.

Performance parameters can be optimized for a specific application. The Lee Company also offers an array of standard manifolds for testing as well as customer-designed manifold configurations for production. Please contact your Lee Sales Engineer for additional technical assistance and application information.

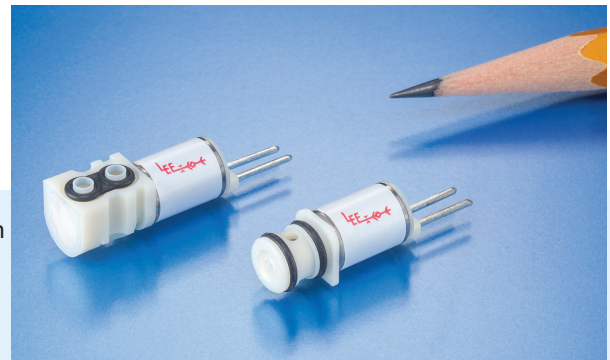
- PPA (Polyphthalamide)
- PBT (Polybutylene Terephthalate)
- PPS (Polyphenylene Sulfide)
- FKM (Fluoroelastomer)

SWITCHING TABLE ¹		
TERMINAL	POLARITY	VALVE STATE
1	-	Open
2	+	
1	+	Closed
2	-	

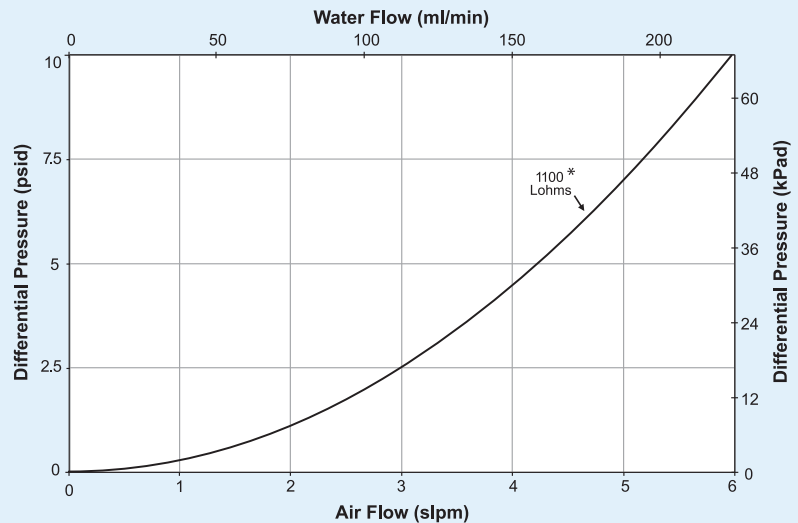
NOTES:

- (1) The valve will switch to and remain in the state indicated when a 10 to 30 ms electrical pulse is applied with the rated voltage and polarity as indicated in the table above.
- (2) Other voltages available upon request.
- (3) Power consumption is calculated based on a 10ms electrical pulse.

- Low Power Consumption
- Magnetically Latched
- Light Weight:
Less Than 2.5 grams
- Ultra Compact Size
- Style: Plug-In and Face Mount
- 100% Tested
- Low Internal Volume
- Operating Pressure Range:
Inlet: Vac – 45 psig
Differential: 10 psid (max)
- Electrical Connection:
0.025" Sq. pin
- Leakage: Less Than 50 μ L/min @ 10 psid, Air 70°F (21°C)
- Operating Temperature Range: 40°F to 120°F (4°C to 49°C)
- Wetted Materials: Housing (PBT), Armature/Core (FeCr Alloy), Spring (316 SS), O-Ring (FKM) and Epoxy. See table below for Internal Seal and Plunger Head wetted materials.



FLOW PERFORMANCE CHARACTERISTICS

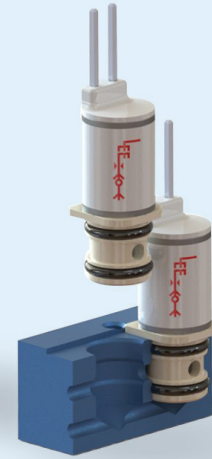
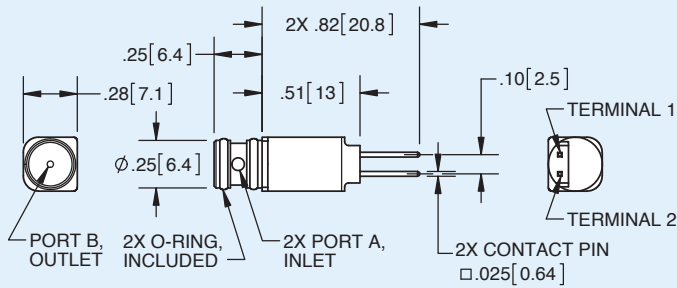


* The Lohm is a measure of flow resistance. Additional information can be found at www.theleeco.com.

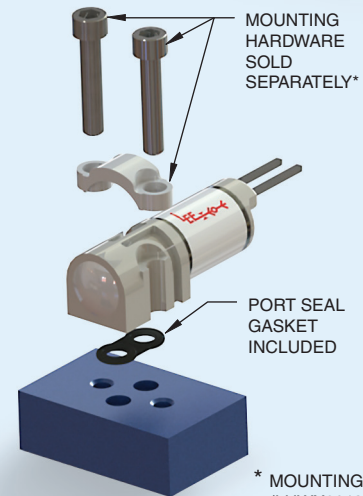
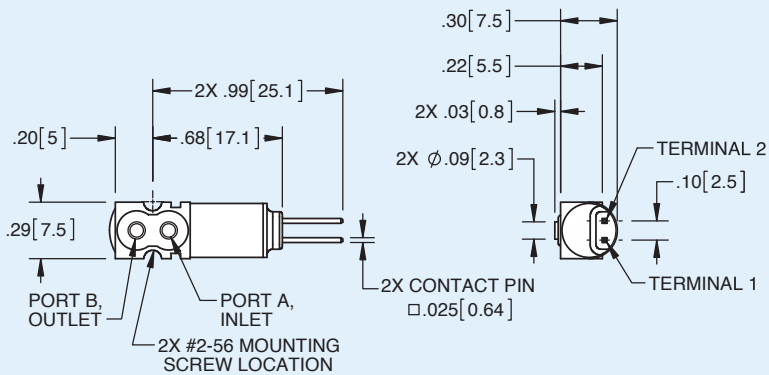
STYLE	PART NUMBER	VOLTAGE ² (vdc)	FLOW CAPACITY ON AIR @ 70°F (21°C)	COIL RESISTANCE @ 70°F (21°C) (ohms)	POWER CONSUMPTION ³ @ 70°F (21°C) (mJ/switch)	WETTED MATERIALS	
						INTERNAL SEAL	PLUNGER HEAD
Plug-In	LHLA0342311H	3.3	1100 Lohms (6 SLPM @ 10 psid; Ref Cv = 0.018)	11	10	Silicone	PPS
	LHLA0542311H	5		23	10		
	LHLA1242311H	12		143	10		
	LHLA0542411H	5		12	22	FKM	PPA
	LHLA1242411H	12		63	22		
Face Mount	LHLA0352311H	3.3		11	10	Silicone	PPS
	LHLA0552311H	5		23	10		
	LHLA1252311H	12		143	10		
	LHLA0552411H	5		12	22	FKM	PPA
	LHLA1252411H	12		63	22		

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Plug-In Manifold

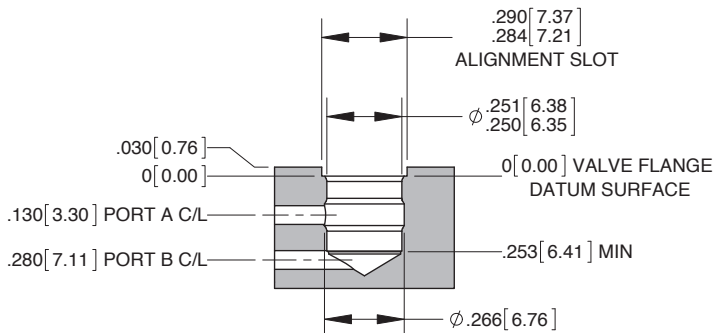


Face Mount Manifold



* MOUNTING SCREW (LHWX0213420A)
SCREW SUPPORT (LHDX0307140A)

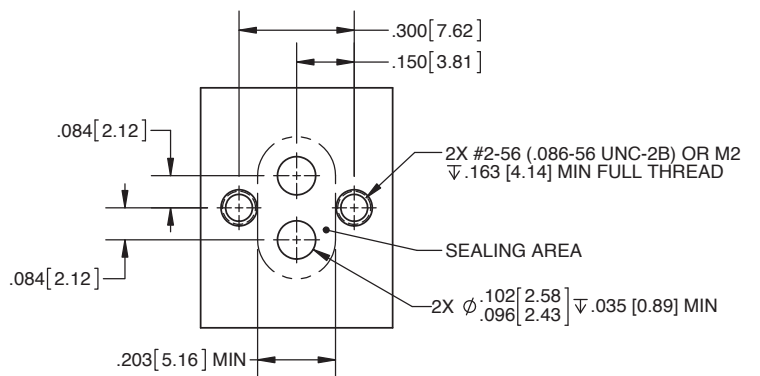
Plug-In Boss Detail



VALVE BOSS MAY BE CREATED USING
LEE CO. CUTTING TOOL
PART NO. TTTA0000250B

Reference Drawing Number LCFX0300250B for Plug-In Boss Detail.

Face Mount Boss Detail



Reference Drawing Number LFIX1002050A for Face Mount Boss Detail.

NOTES: (1) All dimensions are in inches [mm].
(2) Boss detail drawings not to scale.