

# XOVER® SOLENOID VALVE

The Xover® Solenoid Valve is a state-of-the-art internal pinch tube valve that offers zero dead volume, low internal volume, laminar fluid flow, and fast, efficient fluidic performance over a long cycle life.

Designed to minimize instrument consumption of costly reagents, improve throughput, and maintain vitality of cells, Xover boasts low internal volumes and a smooth, low shear, easily flushable fluid path on all models. The novel 3-way model features an innovative Y-shaped elastomer tube geometry which enables ultra-low carryover volume (as low as 3.7  $\mu$ L) when switching between fluids. The 3800 Lohm model offers the lowest internal volume (11  $\mu$ L), while the 1000 Lohm model offers higher flow rates in the same exterior footprint.

For applications requiring 2-way functionality, Xover is also offered in both 2-way normally closed (NC) and 2-way normally open (NO) configurations. Unlike traditional external pinch valves, Xover is durable and switches consistently in less than 40 ms. This eliminates the need for periodic maintenance and provides exceptional, repeatable fluidic responsiveness.

The Xover Solenoid Valve is ideal for applications in flow cytometry, gene sequencing, analytical chemistry, microbiology, and many other applications where low internal volume, zero dead volume, and inert materials are critical performance requirements. Performance parameters can be optimized for custom applications. Contact your Lee Sales Engineer for technical assistance and additional information.

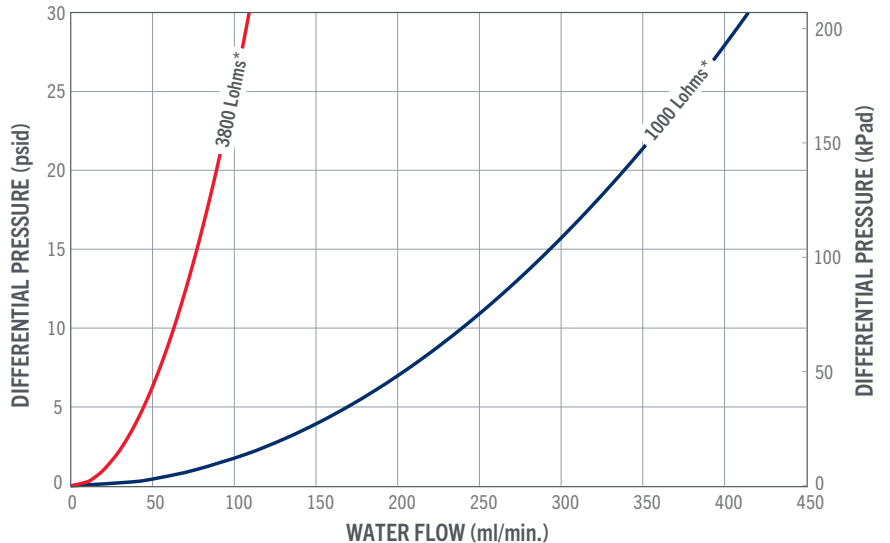
- Zero dead volume
- Low internal volume: as low as 11  $\mu$ L
- Minimal carryover volume (3-way models):  
3800 Lohms: 3.7  $\mu$ L  
1000 Lohms: 9.9  $\mu$ L
- Operating pressure:  
Supply: Vac to 30 psig  
Differential: 30 psid max.
- 1/4-28 flat bottom fluid ports
- Wetted materials: PEEK, FKM (treated)



- Operating temperature range: 45°F to 118°F (7°C to 48°C)
- Response time: less than 40 ms
- Cycle life: 5 million cycles (minimum)
- Low power consumption: 2.1 W

CONFIGURATION	VOLTAGE (Vdc)	PART NUMBER	LOHM* RATE	INTERNAL VOLUME ( $\mu$ L)
2-way NC	12	LXRA1205100B	1000 Lohms (Cv = 0.02)	19
2-way NC	24	LXRA2405100B		19
2-way NO	12	LXRA1205200B		19
2-way NO	24	LXRA2405200B		19
3-way	12	LXRA1205000B		32
3-way	24	LXRA2405000B		32
3-way	12	LXRA1201000B	3800 Lohms (Cv = 0.005)	11
3-way	24	LXRA2401000B		11

## FLOW PERFORMANCE CHARACTERISTICS

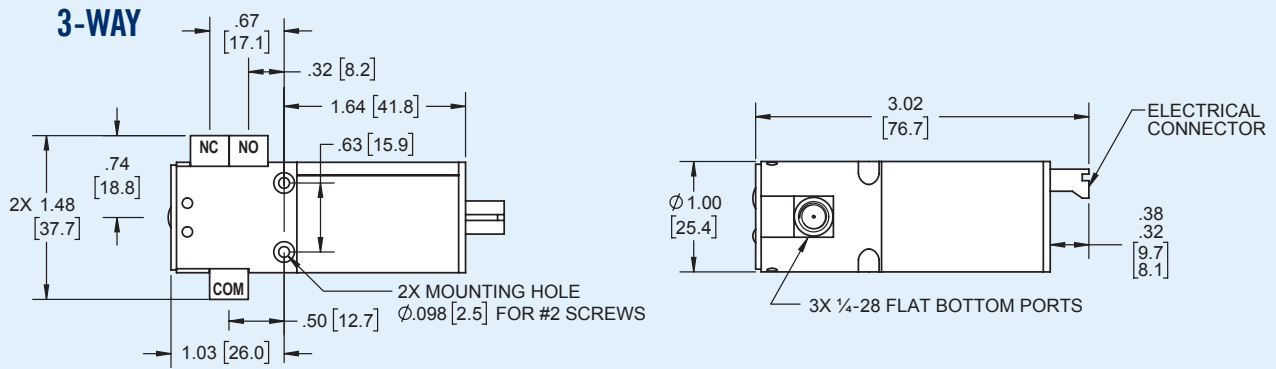


\* The Lohm is a measure of flow resistance. Additional information can be found at [theleeco.com/Lohm](http://theleeco.com/Lohm).

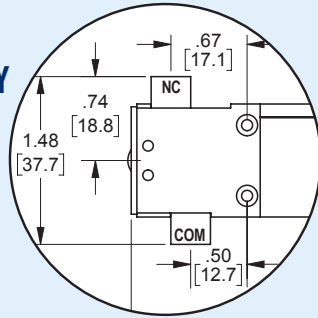
See dimensional drawings on reverse.



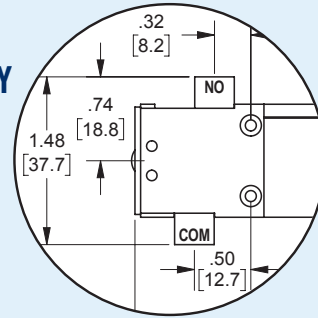
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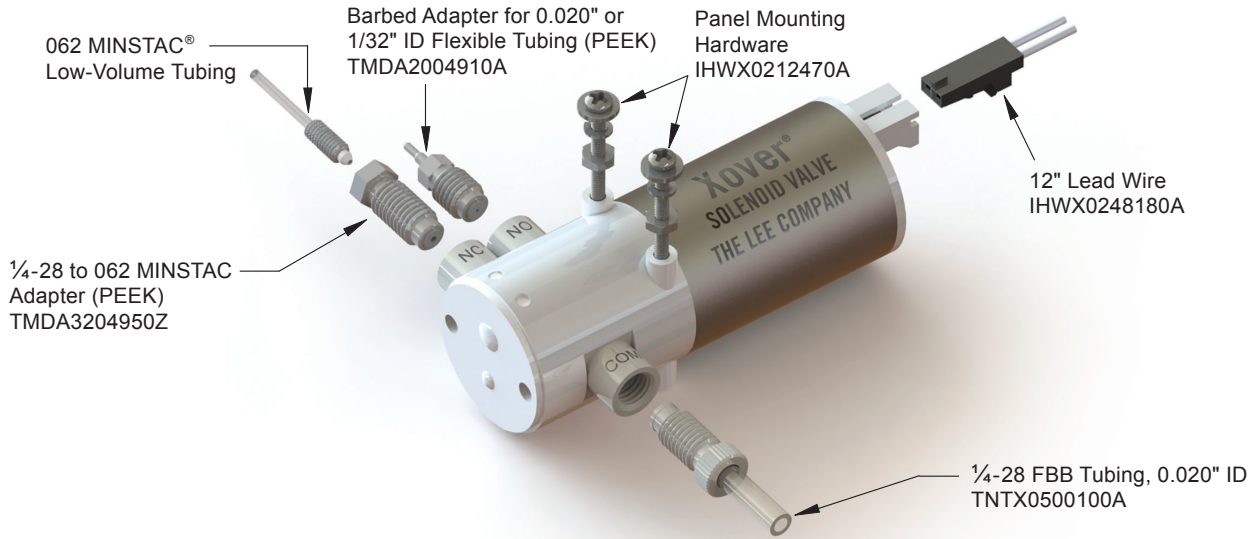
## 2-WAY NORMALLY CLOSED



## 2-WAY NORMALLY OPEN



## ACCESSORIES



## STARTER KITS AND HARDWARE

PART NUMBER	DESCRIPTION
IKTX0322850A	Starter kit: three TNTX0500100A tubing assemblies, one IHWX0212470A panel mounting hardware kit, three TMDA2004910A 1/4-28 flat bottom to 1/32" ID flexible tubing adapters, and a IHWX0212470A lead wire
IKTX0322760A	Starter kit: one LXRA2401000B Xover valve (24 Vdc, 3800 Ohms), three TNTX0500100A tubing assemblies, panel mounting hardware, and a 12" lead wire
IKTX0322770A	Starter kit: one LXRA1201000B Xover valve (12 Vdc, 3800 Ohms), three TNTX0500100A tubing assemblies, panel mounting hardware, and a 12" lead wire
TMDA2004910A	Barbed adapter for 0.020" or 1/32" ID soft tubing, PEEK and PTFE
TMDA3204950Z	062 MINSTAC to 1/4-28 FBB adapter, PEEK and PTFE
TMPA9502909Z	1/4-28 boss plug, PEEK and PTFE
IHWX0248180A	12" lead wire
IHWX0212470A	Panel mounting hardware kit for panels up to 0.25" thick

