

# XOVER® SOLENOID VALVE

Introducing Xover®, our latest innovation in sample switching technology. This new internal pinch tube solenoid valve offers an exceptionally low carryover volume and fast, efficient fluidic performance. The internal pinch tube mechanism is easily flushed and has a carryover volume of just 3.7 µL. This tube also allows for single-plane flow through the valve, keeping fluid flow laminar. Xover can switch states in less than 40 ms and provides responsive fluidic performance in any system. In addition, the total internal volume of this 3-way solenoid valve is only 11 µL. Xover features industry-standard ¼-28 ports and an operating pressure range from vacuum to 30 psig, making the valve perfectly suited for life science and analytical applications.

The new Xover solenoid valve is ideal for applications in flow cytometry, gene sequencing, analytical chemistry, microbiology, and numerous other places where low internal volume, zero dead volume and inert materials are critical performance requirements. Xover enables efficient switching between samples, calibrants and reagents to improve sample throughput while reducing system volume and fluid consumption.

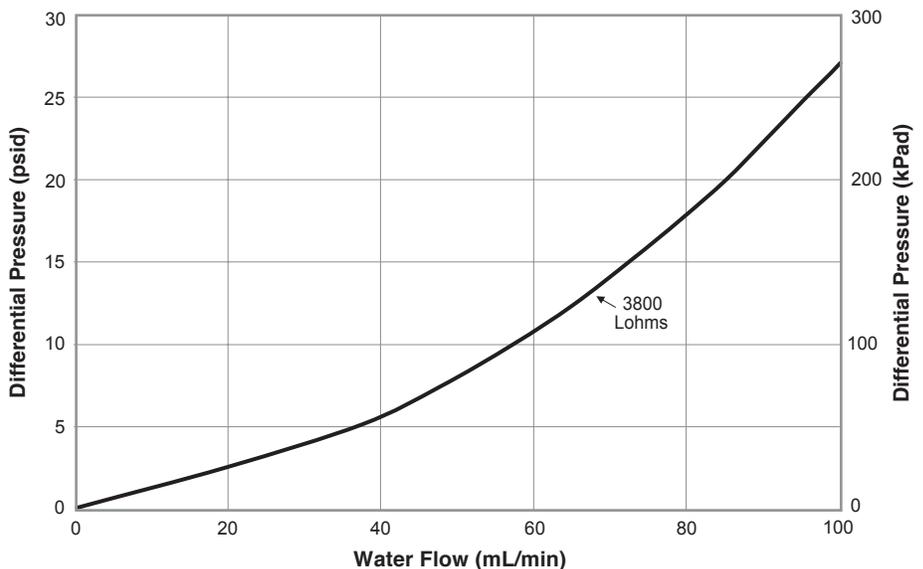


- Zero dead volume
- Internal volume: 11 µL
- Carryover volume: 3.7 µL
- Operating pressure:  
Supply: Vac to 30 psig  
Differential: 30 psid max.
- ¼-28 flat bottom boss fluid ports
- Wetted materials: PEEK, FKM (treated)
- Operating temperature range: 45°F to 118°F (7°C to 48°C)
- Response time: less than 40 ms
- Cycle life: 5 million cycles (minimum)
- Low power consumption: 2.1 W

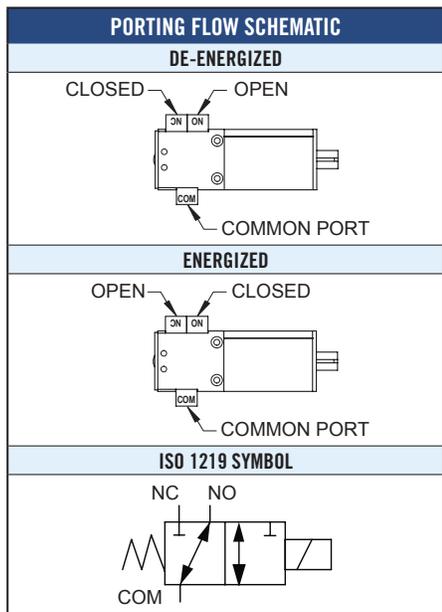
PART NUMBER	VOLTAGE (Vdc)	LOHM RATE	PORTING STYLE
LXRA1201000B	12	3800 Lohms (38 mL/minute minimum at 5 psid; Ref. Cv = 0.004)	¼-28 FBB
LXRA2401000B	24	3800 Lohms (38 mL/minute minimum at 5 psid; Ref. Cv = 0.004)	¼-28 FBB

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

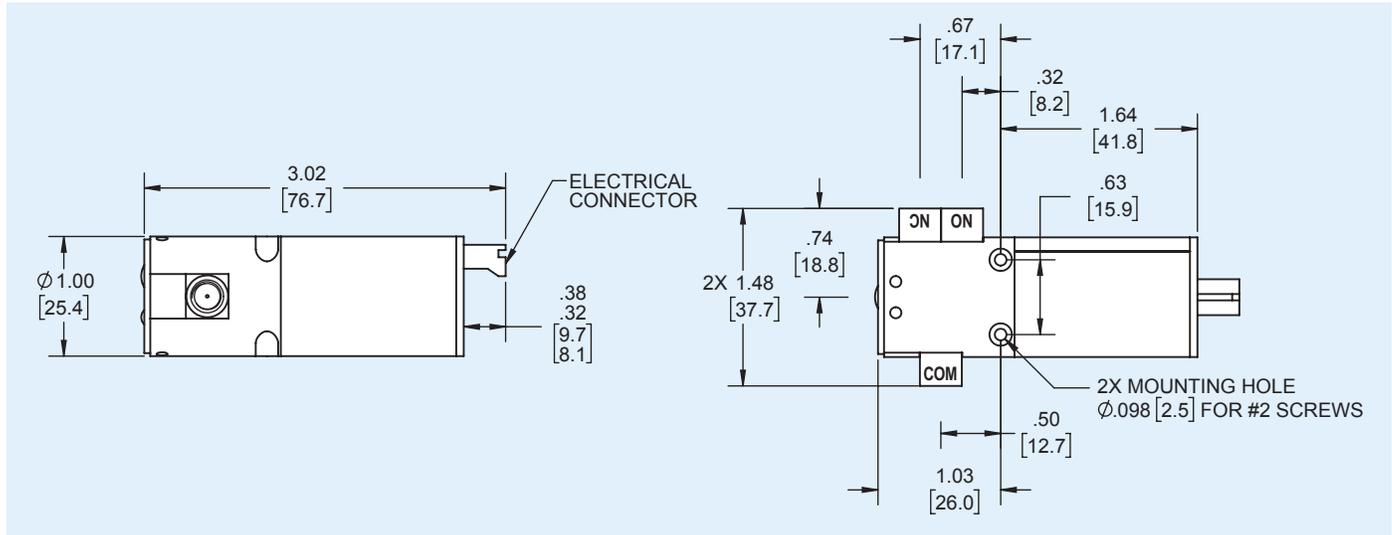
## FLOW PERFORMANCE CHARACTERISTICS



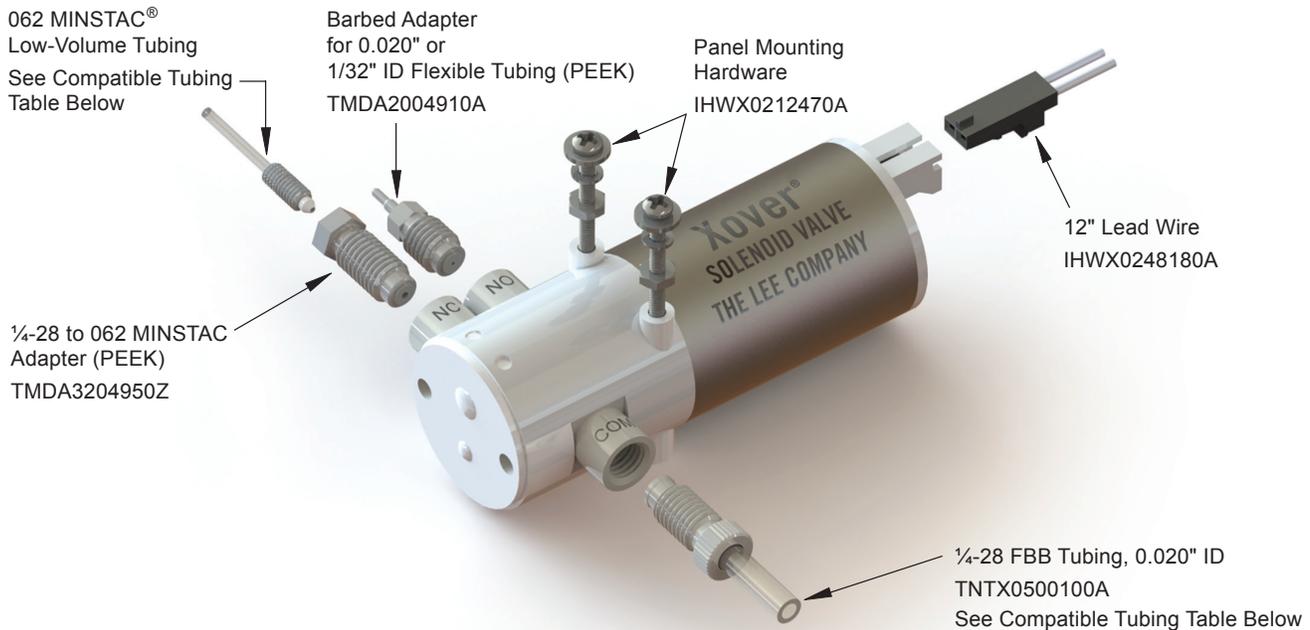
See dimensional drawings on reverse.



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## ACCESSORIES



### COMPATIBLE TUBING

PART NUMBER	INNER DIAMETER mm (inches)	LENGTH cm (inches)	NUMBER OF CONNECTORS	INTERNAL VOLUME ( $\mu$ L)	WETTED MATERIALS
TNTX0500100A <sup>1</sup>	0.5 mm (0.020")	30 cm (11.8")	2	62	PTFE, ETFE
TUTC1226915L <sup>2</sup>	0.3 mm (0.012")	15 cm (5.9")	2	11	PTFE, PCTFE
TUTC1226930L <sup>2</sup>	0.3 mm (0.012")	30 cm (11.8")	2	22	
TUTC1226960L <sup>2</sup>	0.3 mm (0.012")	60 cm (23.6")	2	44	
TUTB1226910D <sup>1,2</sup>	0.3 mm (0.012")	100 cm (39.4")	1	73	

1. Can be trimmed to length by the customer, additional lengths available upon request.

2. Requires TMDA3204950Z adapter.

### STARTER KITS AND HARDWARE

PART NUMBER	DESCRIPTION
IKTX0322760A	Starter Kit: 24 Vdc Xover valve, three TNTX0500100A tubing assemblies, panel mounting hardware, and 12" lead wire
IKTX0322770A	Starter Kit: 12 Vdc Xover valve, three TNTX0500100A tubing assemblies, panel mounting hardware, and 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