

KM/KL Series – 0.75" (19.05 mm) and 1.0" (25.4 mm) Solenoids

- ▶ 2-Way Normally Open/Closed; 3-Way Directional
- ▶ MOPD: 10 PSIG to 30 PSIG (0.69 bar to 2.07 bar); to 60 PSIG (4.17 bar) on 3-Way
- ▶ C_v Range: 0.011 to 0.105
- ▶ As Low as 2.8 Watts

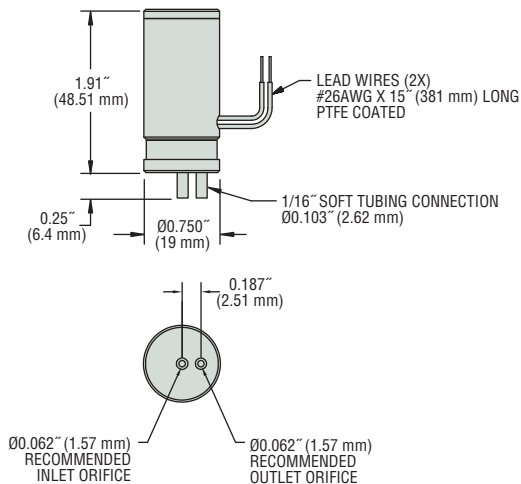
These isolation valves offer 2-way Normally Open (NO) and Closed (NC), or 3-way Directional Control operation. While sharing similar configurations with the KM Series, the KL Series features larger orifice sizes with greater C_v values. Their design ensures that the only wetted parts are the valve diaphragm and body.

Find Ordering Information on Page J-32.

Dimensions – Tube Mount Body

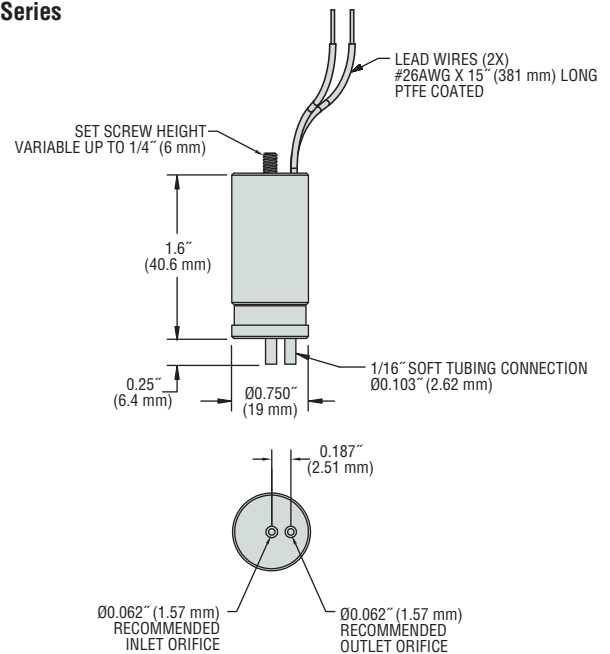
2-Way, Normally Open (N.O.)

KM Series



2-Way, Normally Closed (N.C.)

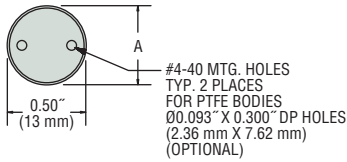
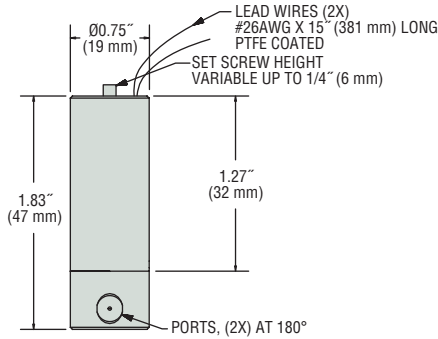
KM Series



Dimensions – Side Port Body

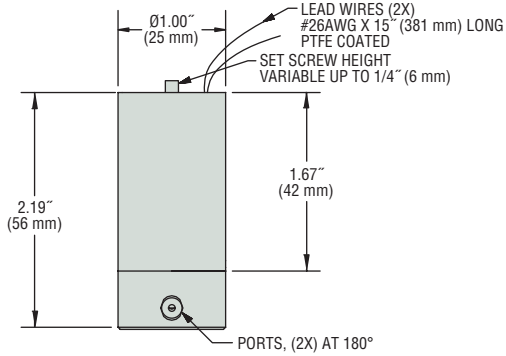
2-Way, Normally Closed (N.C.)

KM Series



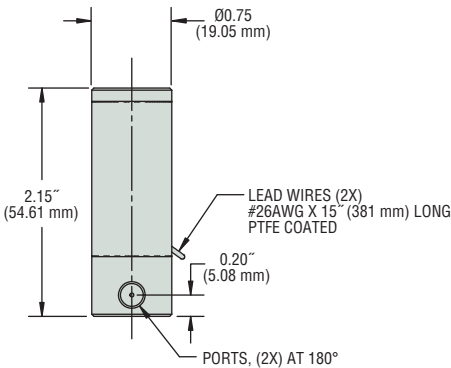
Orifice Size (inch)	Dim A	
	inch	mm
0.032	0.75	19.05
0.054	0.75	19.05
0.062	0.875	22.23

KL Series

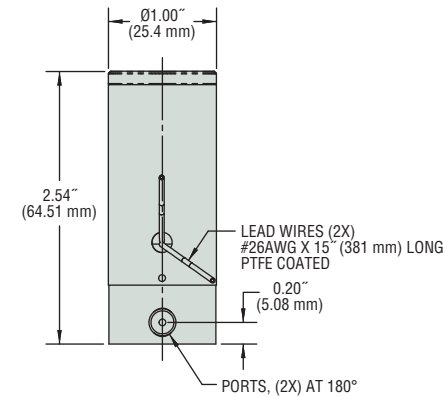


2-Way, Normally Open (N.O.)

KM Series

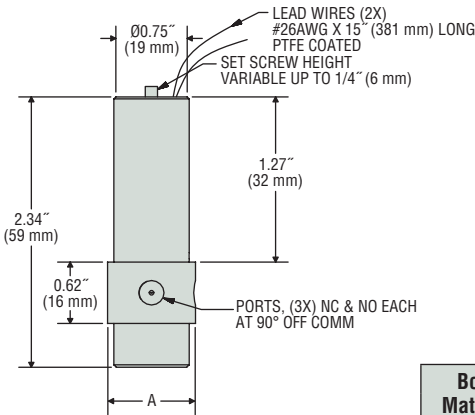


KL Series



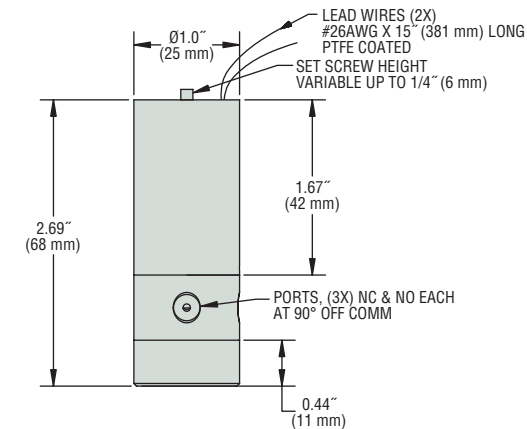
3-Way, Normally Closed (N.C.), Multi-Purpose, Directional Control

KM Series



Body Material	Dim A	
	inch	mm
PTFE	0.875	22.225
All Others	0.75	19.05

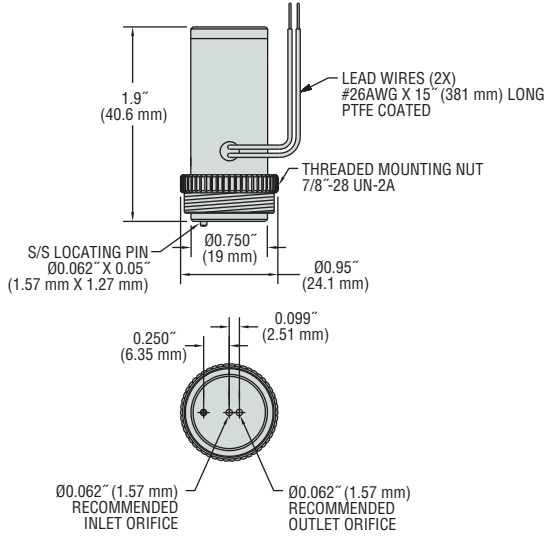
KL Series



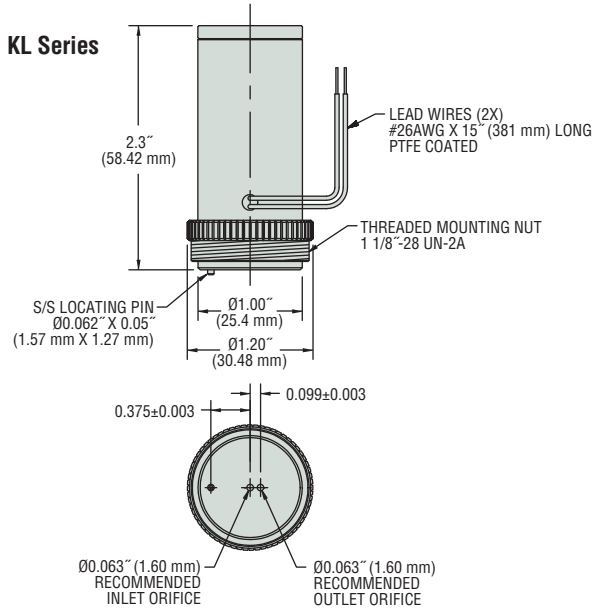
Dimensions – Manifold Mount Body

2-Way, Normally Open (N.O.)

KM Series

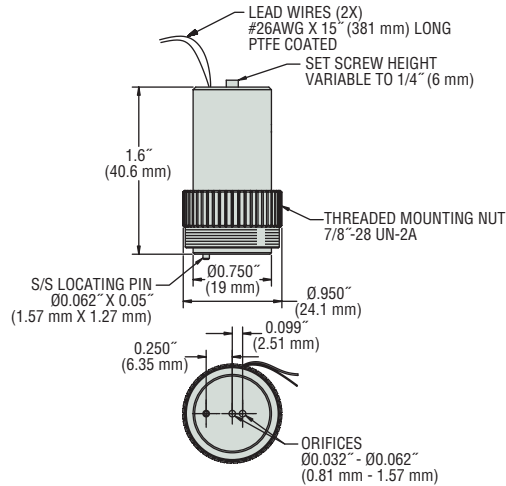


KL Series

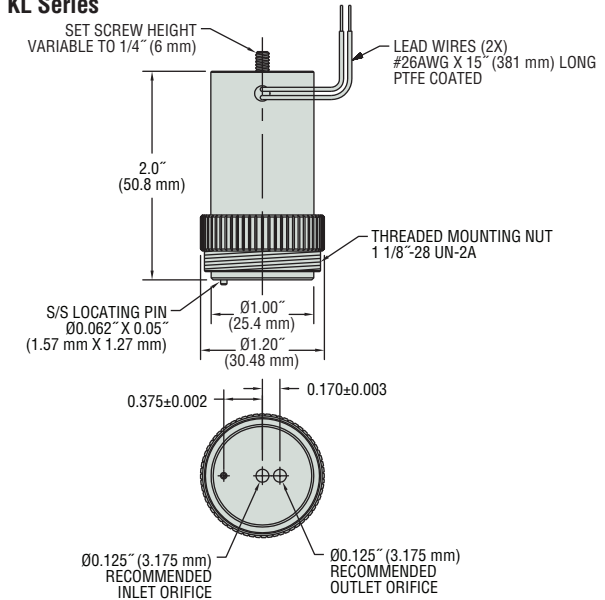


2-Way, Normall Closed (N.C.)

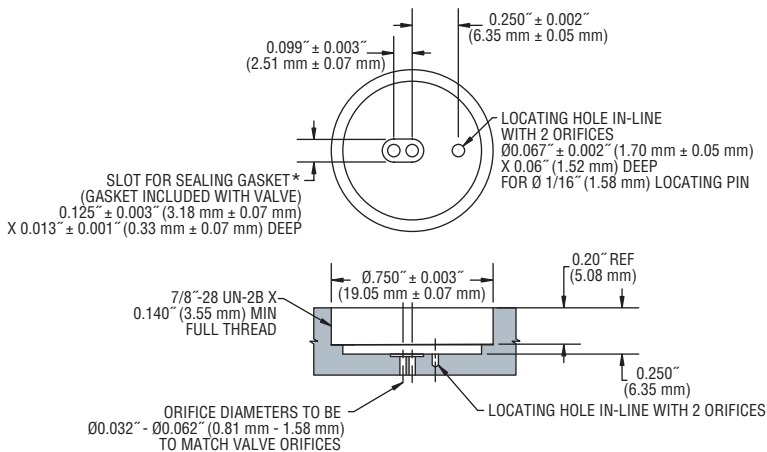
KM Series



KL Series



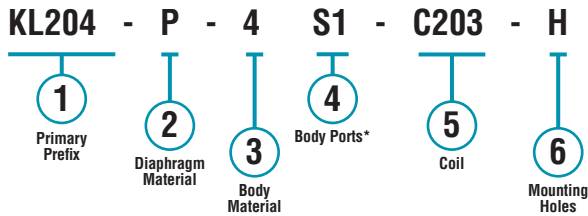
Manifold Preparation – KM Series



Note: Valve spacing to be 1.00" (25.4 mm) min. center to center
* FFKM gasket is provided for manifold mount valves.

How To Order

Use the **Bold** characters from the choices listed to construct a product code.



* Combination of Body Port Configuration and Port Thread; BM, BT, SL and SU do **not** use the Thread Size designator

Example: KL204-P-4 S1-C203-H

2-Way N.C. solenoid valve with a PEEK body and FFKM diaphragm configured with 1/4"-28 UNF threaded Side Ports, optional mounting holes, and operating at 12 VDC.

Part Prefix Table ①

	Orifice (inch)	MOPD*		C _v	Internal Volume (μl)			① Primary Prefix
		psig	bar		Side Mount	Manifold Mount	Tube Mount	
2-WAY N.C.	0.032	20	1.38	0.011	19	33	—	KM201
	0.054	20	1.38	0.027	39	N/A	—	KM203
	0.062	20	1.38	0.03	54	52	106	KM204
	0.062	30	2.07	0.042	55	55	—	KL204
	0.092	15	1.03	0.08	133	N/A	—	KL205
	0.125	10	0.69	0.105	296	223	—	KL206
2-WAY N.O.	0.032	20	1.38	0.011	19	33	—	KM221
	0.054	20	1.38	0.027	39	N/A	—	KM223
	0.062	20	1.38	0.03	54	52	106	KM224
	0.062	30	2.07	0.042	55	55	—	KL224
	0.092	10	0.69	0.08	133	N/A	—	KL225
	0.125	10	0.69	0.105	296	223	—	KL226
3-WAY Directional Controls	0.032	15 (NC/O) 20 (Com)	1.03 (NC/O) 1.38 (Com)	0.01	45	N/A	—	KM341
	0.046	15 (NC/O) 20 (Com)	1.03 (NC/O) 1.38 (Com)	0.023	52	N/A	—	KM342
	0.032	30 (NC/O) 60 (Com)	2.07 (NC/O) 4.14 (Com)	0.01	47	N/A	—	KL341
	0.062	30 (NC/O) 60 (Com)	2.07 (NC/O) 4.14 (Com)	0.028	87	N/A	—	KL344

* Maximum Operational Pressure Differential

② Diaphragm Material

2-Way

T = PTFE Polytetrafluoroethylene
E = EPDM Ethylene Propylene Diene (M)
V = FKM Fluoroelastomers¹
P = FFKM Perfluoroelastomer

3-Way KM

T = PTFE Polytetrafluoroethylene
E = EPDM Ethylene Propylene Diene (M) (N/A for syringe)
P = FFKM Perfluoroelastomer (N/A for syringe)

3-Way KL

T = PTFE Polytetrafluoroethylene

③ Body Material

1 = PTFE Polytetrafluoroethylene
2 = ETFE Ethylene Tetrafluoroethylene
3 = PPS Polyphenylene Sulfide
4 = PEEK Polyaryletheretherketone
5 = PSU Polysulfone²

④ Body Port Configuration

BM = Manifold mount³

BT = Tube mount - accomodates 1/16" ID soft tubing^{3,4}

SL = Syringe - luer common port & 1/4"-28 UNF NC/O ports⁵

SU = Syringe - 1/4"-28 UNF ports⁵

S_ = Threaded side port

B_ = Threaded bottom port

Port Thread (Used in conjunction with Threaded Port Configurations)

1 = 1/4"-28 UNF flat bottom (Standard)

2 = 10-32 (N/A for L 0.092 & 0.125)⁶

3 = 5/16"-24

4 = 1/8" NPT

5 = M6 X 1,0

⑤ Coil

C203 = 12 VDC

C204 = 24 VDC

C109 = 115 VAC

C116 = 220 VAC

⑥ Mounting Holes

(blank) = Holes not required

H = Mounting Holes in body

Notes

1. Not available in KL2X5 or KL2X6.

2. Available in KM 2X4, E/V diaphragms, BM/BT port configurations.

3. See internal volume chart for available orifices.

4. PSU body only.

5. Available in KM3XX, PEEK body, PTFE diaphragm.

6. Not available in KL2X5 or KL2X6.

Gems specializes in the design and manufacturing of custom solenoid valves and fluidic systems. If you don't see what you're looking for, or have a question, contact us at 800-378-1600 or info@gemssensors.com.