Lexair, Inc.

TUBE MATIC.



Specially Designed for Abrasive and Corrosive Applications

- 1/4" to 2 1/2" Remote Control Shut-Off Valves
- Solves Problems of Wear and Maintenance in Abrasive and Corrosive Media
- No Spools, Poppets or Sliding Seals That Can Wear or Stick
- Available with Solenoid and Pilot Actuators

Valves for Abrasive and Corrosive Liquids and Gases to 150

Pinch Valve Concept

The TUBE-O-MATIC has been designed to include the excellent features of the pinch valve <u>without the inherent</u> <u>weaknesses</u>. The TUBE in the TUBE-O-MATIC does not collapse entirely as the tubing does in a pinch valve. The TUBE-O-MATIC closes on the airfoil center core. Thus the movement of the TUBE is substantially reduced, resulting in extended TUBE life.

Bi-Directional

The normally open TUBE-O-MATIC valve design allows media flow in both directions. This feature can prove invaluable in systems requiring both forward and reverse control.

How It Works

The TUBE-O-MATIC tube is controlled by an external pneumatic or hydraulic pilot pressure. To close the valve, pilot pressure is applied, closing the tube around the center core and sealing bubble tight. To open the valve, pilot pressure is exhausted. The small tube deflection permits a high cycle rate, with minimal flow noise and shock-free smooth opening or closing on fluids.



Straight-Thru Flow

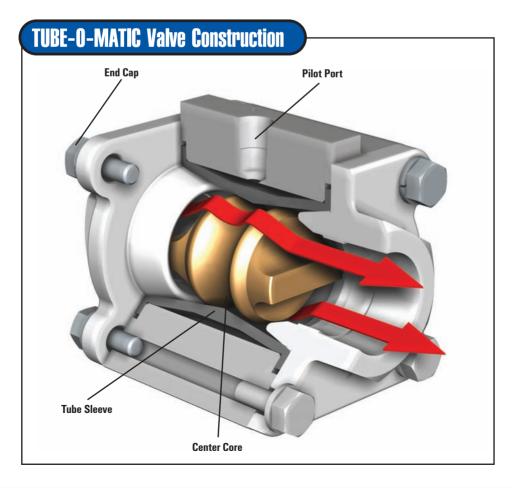
This type of flow pattern eliminates the build-up of solids in the valve body. It acts as a self-flushing unit.

Large-Capacity

With a Cv range of 4.0 to 75.0 and pipe sizes available from 1/4" NPT to 2 1/2"NPT TUBE-O-MATIC has a valve to fit your application. The airfoil design of the center core and the straight-through flow pattern result in capacity which compares to ball valves.

Minimum Wear

The only moving part in the TUBE-O-MATIC is the tube and that movement is held to a minimum, by the center core tube support design, giving a long trouble-free life.



Port Size	Solenoid	Pilot	Flow	Weight, lbs.		
N.P.T.	Model	Model	CV	Sol.	Pilot	
1/4	310404	310204	4.0	4 1/2	3 1/2	
3/8	310406	310206	4.3	4 1/2	3 1/2	
1/2	310408	310208	4.6	4 1/2	3 1/2	
3/4	310412	310212	14.0	7 1/2	6 1/2	
1	310416	310216	15.0	7 1/2	6 1/2	
1 1/4	310420	310220	34.0	15	14	
1 1/2	310424	310224	36.0	15	14	
2	310432	310232	65.0	27 1/2	26 1/2	
2 1/2	310440	310240	75.0	27 1/2	26 1/2	

Solenoi	Solenoid Selectors							
-х	Voltage/Hz							
<u>—1</u>	120V/60Hz							
— 2	240V/60Hz							
—3	480V/60Hz							
—4	6V-DC							
— 5	12V-DC							
<u>—</u> 6	24V-DC							
— 7	24V/60Hz							

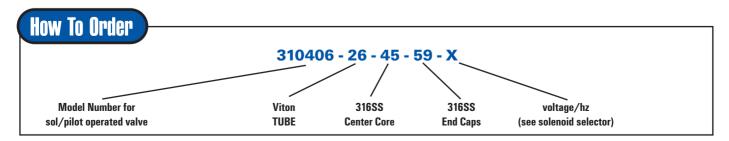
	Temperature Range	1/4 - 3/8 - 1/2	3/4 - 1	1 1/4 - 1 1/2	2 - 2 1/2
Center Core					
Brass, (Nickel Plated) Aluminum, (Nickel Plated) PVC 316 Stainless Teflon	0 - 150° F	Std. N/A 43 45 46	Std. N/A 43 45 46	Std. N/A C/F C/F 46	N/A Std. C/F C/F 46
End Caps					
Bronze, (wetted surfaces, Nickel Plated) 316 Stainless PVC	0 - 150° F	Std. 59 57	Std. 59 57	Std. C/F C/F	Std. C/F C/F
Tube					
Buna N Viton Ethylene Propylene	-20 - 200° F 0 - 400° F -20 - 300° F	Std. 26 29	Std. 26 29	Std. 26 29	Std. 26 29
Solenoid Protector					
J.I.C. Housing X-proof Brad Harrison Connector		55 51 53	55 51 53	55 51 53	55 51 53

Standard options shown. Consult factory for solenoid and coil modifications, and special material, which are available on special quote.

Maximum Media Pressure

- 150 PSI solenoid/pilot
- Solenoid valve is multi-purpose rated at 150 PSI applied to either normally open or normally closed port

Note: Minimum pilot to media ratio is 1:1. For maximum TUBE life the pilot to media pressure differential should not exceed 20 PSI. For line pressures below 50 PSI, pilot pressure must be line pressure + 15 PSI.



Lexair® Valves for Every Application

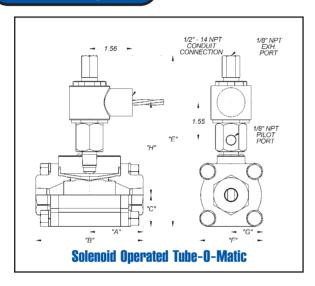
Valves for Abrasive and Corrosive Liquids and Gases to 150 PSI

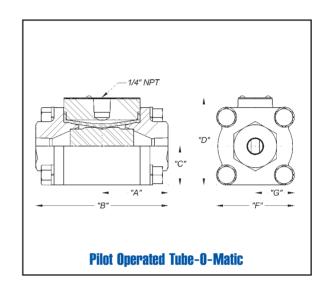


Applications:

TUBE-O-MATIC valves are used on machine tools, in chemical plants, on sandblasting equipment, on food processing machines, on paper processing equipment, fluid reclamation systems, and anywhere else where corrosive or abrasive materials are the media.

Dimensions (inches





NPT Solenoid Port Pilot Size Model	Solenoid	Direct Pilot Model	Overall Dimensions							
			Α	В	С	D	E	F	G	Н
1/4	310404	310204	1.94	3.88	1.13	2.50	6.40	2.25	1.13	3.06
3/8	310406	310206	1.94	3.88	1.13	2.50	6.40	2.25	1.13	3.06
1/2	310408	310208	1.94	3.88	1.13	2.50	6.40	2.25	1.13	3.06
3/4	310412	310212	2.16	4.31	1.50	3.19	7.08	3.00	1.50	3.31
1	310416	310216	2.16	4.31	1.50	3.19	7.08	3.00	1.50	3.31
1 1/4	310420	310220	3.31	6.63	2.00	4.19	8.08	4.00	2.00	4.19
1 1/2	310424	310224	3.31	6.63	2.00	4.19	8.08	4.00	2.00	4.19
2	310432	310232	4.41	8.81	2.88	5.81	9.71	5.75	2.88	4.94
2 1/2	310440	310240	4.41	8.81	2.88	5.81	9.71	5.75	2.88	4.94





