

Description

The Triac[®] TVCS Solenoids are design to mount directly to the Triac[®] pneumatic actuators which eliminates tubing and fittings. The Triac[®] TVCS Solenoid are available in several optional voltages. All Triac[®] TVCS Solenoids are leakfree and bubbletight.

Material

Part Description	Material		
Valve Body & Plunger	Aluminum		
Actuating Caps – Solenoid	Synthetic Resin		
Actuating Caps – Spring Cap	Aluminum		
Plunger & Body Seals	NBR (Nitrile)		
Pilot Piston Seals	NBR (Nitrile)		
Actuator mounting O-Rings	NBR (Nitrile)		
Pilot Piston	Synthetic Resin		
Screws	Plated Steel		
DIN Connector	Synthetic Resin		

Part Numbers & Coil Data



Porting Size - Inlet & Exhaust = 1/4" NPT
Flow Rates - Cv = 1.4
Ambient Temp - 32 Deg F to 122 Deg F
(For temperatures below 32 Deg F, Air must be free of water vapor)
Pressure - Operating: 22 PSI Minimum / 118 PSI Maximum
Maximum Pressure: 150 PSI
Media - Dry or lubricated non-corrosive gas compatible with nitrile seals

Operator Type	AC Voltage		ohms	Nominal	Operator Type	DC	ohm	Nominal Power
Operator Type				Power		Voltage		
TVCS-xxxx-4N-A24	24VAC / 50-60HZ		52	5 VA	TVCS-xxxx-4N-D12	12VDC	CF	3 Watt
TVCS-xxxx-4N-A120	120VAC / 50-60HZ		1164	5 VA	TVCS-xxxx-4N-D24	24VDC	197	3 Watt
TVCS-xxxx-4N-A240	240VAC / 50-60HZ		4468	5 VA	TVIS-xxxx-4N-D24	24VDC	275	1.6 Watt
4N - Watertight, IP65, CE								
Approved								

TVIS-XXXX-4N-D24 uses NASS Controls Model 1259 Intrinsically safe solenoid operator. Entity parameters: Vmax=28V, Imax=115mA, Li=0, Ci=0, Imin=37mA, Vmin=12V Intrinsically Safe: FM & CSA Approved - Class I (Group A, B, C, D); Class II (Group E, F, G), Class III, DIV I with PG9 cable gland, mini-DIN type connector

Flow Pattern Schematics

FUNCTION	PORT SIZE	CV	SPRING SOLENOID / SPRING RETURN, 2 POSITON	DOUBLE SOLENOID / DETENT, 2 POSITION		
			TVCS-X411-4N-VOLTAGE	TVCS-X421-4N-VOLTAGE		
4-WAY 5/2	1/4" NPT	1.4				

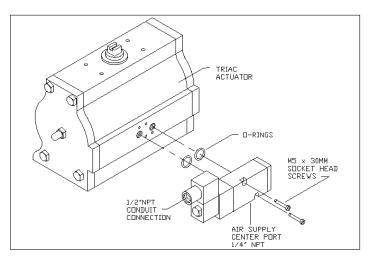
Installation Instructions



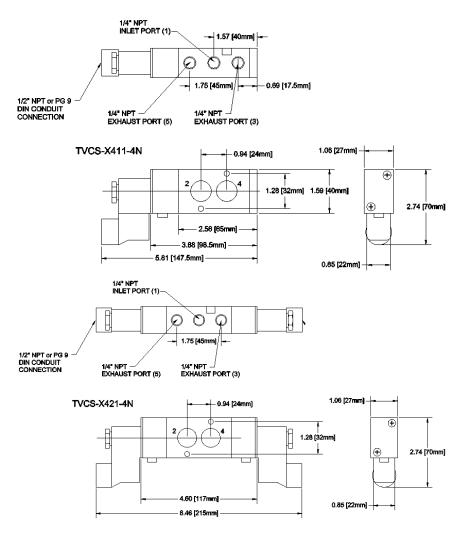
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- Place the O-rings provided into the O-ring bores on the face of the solenoid valve. Each O-ring should be completely seated in the bore.
- 2. Place the actuator with the two ports facing you, and the pinion pointing up. Orient the TVCS Solenoid Valve with the (2) O-rings toward the actuator and the operator towards the left.
- 3. The solenoid valve is then mounted to the actuator with the two screws provided.
- 4. Connect the air supply to the center port and wire solenoid per local and national electrical codes. The assembly is now ready for operation.
- 5. Optional bronze vents or adjustable speed controls can be added to the exhaust ports.



Dimensions

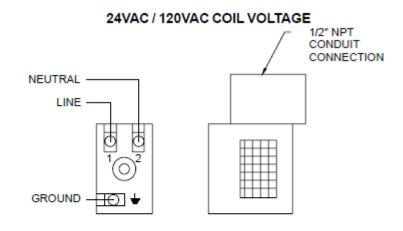




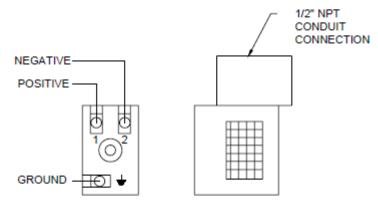
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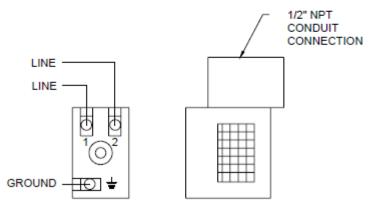
Wiring Diagram



12VDC / 24VDC COIL VOLTAGE



220VAC / 1PHASE COIL VOLTAGE







A-T Controls product, when properly selected, is designed to perform its intended function safely during its useful life. However, the purchaser or user of A-T Controls products should be aware that A-T Controls products might be used in numerous applications under a wide variety of industrial service conditions. Although A-T Controls can provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser / user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of A-T Controls products. The user should read and understand the installation operation maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of A-T Controls products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes only. Because A-T Controls is continually improving and upgrading its product design, the specifications, dimensions and information contained in this literature are subject to change without notice. Should any question arise concerning these specifications, the purchaser/user should contact A-T Controls.

For product specifications go to http://download.a-tcontrols.com/

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