

### 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

**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

### Part Numbers & Coil Data

Operator Type	AC Voltage	ohms	Nominal Power	Operator Type	DC Voltage	ohm	Nominal Power
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

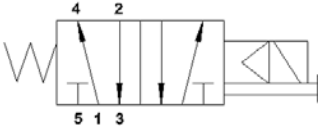
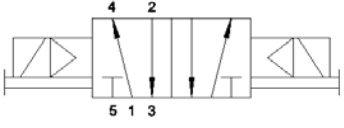
4N - Watertight, IP65, CE  
Approved

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

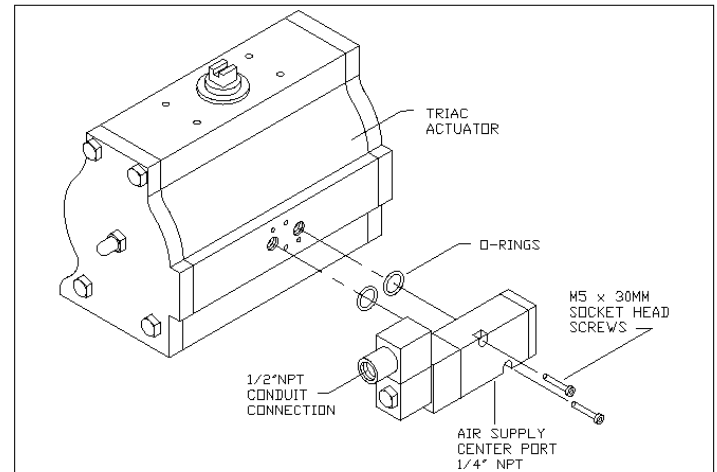
**Intrinsically Safe:** FM & CSA Approved - Class I (Group A, B, C, D); Class II (Group E, F, G), Class III, DIV I with PG9 cable gland, mini-DIN type connector

### Flow Pattern Schematics

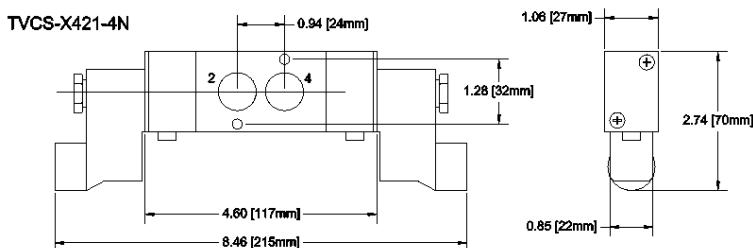
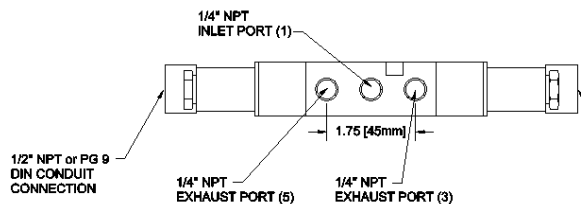
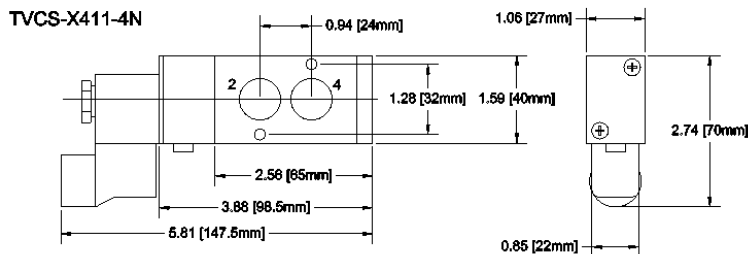
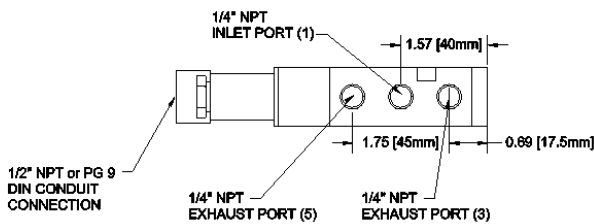
FUNCTION	PORT SIZE	CV	SPRING SOLENOID / SPRING RETURN, 2 POSITION	DOUBLE SOLENOID / DETENT, 2 POSITION
			TVCS-X411-4N-VOLTAGE	TVCS-X421-4N-VOLTAGE
4-WAY 5/2	1/4" NPT	1.4		

### Installation Instructions

1. 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.

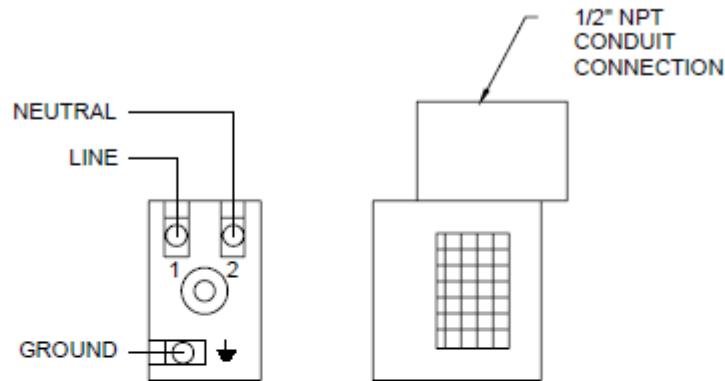


### Dimensions

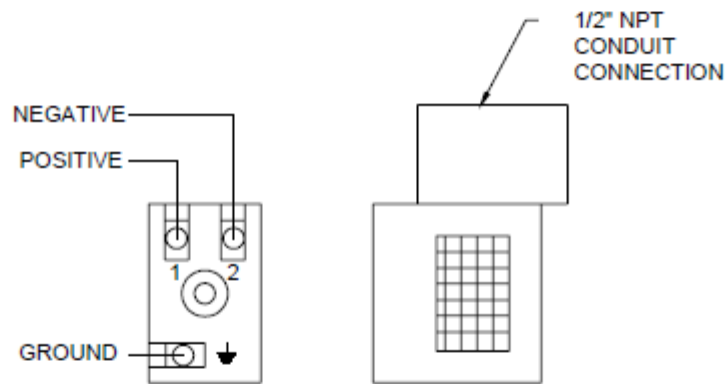


Wiring Diagram

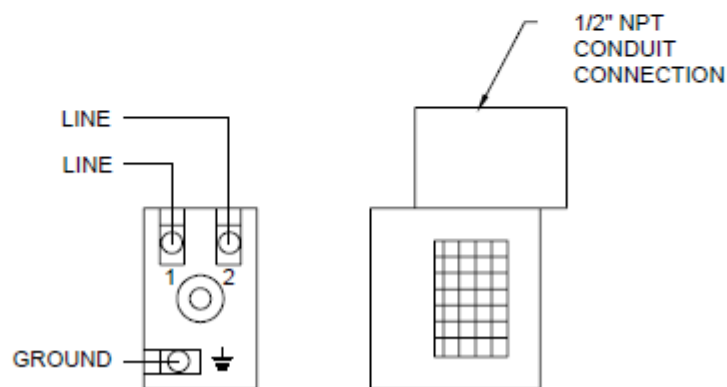
**24VAC / 120VAC COIL VOLTAGE**



**12VDC / 24VDC COIL VOLTAGE**



**220VAC / 1PHASE COIL VOLTAGE**



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

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