

## High-Performance "TriCore" Tubular Technology

Now Jewell Instruments delivers an "interposer" version of the smallest and most power-efficient tubular solenoid available in the industry! Employing the company's patent-pending TriCore technology, the solenoid's outer shell is machined out of solid stock, resulting in only three magnetic air gaps instead of the usual four. The result is that the solenoid's magnetic efficiency is increased (and power consumption decreased). The T12's small size further reduces wattage and power demands to perform the work assignment.

The T12 Interposer features an internal spring that maintains its 1/8" plunger (or "shear pin") in an extended position (where it can "interpose" itself between, for example, a latch or lock). When power is applied, the plunger retracts to a flush position. As such, it is ideal for battery powered locking and similar applications.

### **Benefits**

High Power Efficiencies — The most magnetically-efficient tubular solenoid design in the industry reduces power requirements by 25%.

**Proven Performance** — Built for dependability and extremely reliable under rugged conditions.

Cost-Effective Design — Jewell Instruments' experience in high-volume production results in a design that is less labor-intensive to manufacture.

# Typical Applications Include:

- Power management
- Safe locks Latching mechanisms
- Battery operated devices 
  Computer peripherals

# Solenoid Solutions That Fit Your Unique Needs

For over 25 years, Jewell Instruments has provided businesses with highquality, standard and custom solenoids. We also offer next-level assembly support in addition to designing and manufacturing electronic modules that interface with solenoids and other electromechanical devices.

Superb product design sets us apart from the competition with our engineering expertise covering mechanical, electro-mechanical, magnetics and electronics. Add that to our broad applications understanding and our decades of solenoid sales experience. The result is a solid reputation for quality, reliability, innovative solutions, unmatched customer service and very flexible production scheduling.

# T12 <sup>3</sup>/<sub>8</sub>" Interposer Tubular Solenoid

Dependable and Power-Efficient TriCore Technology

# Technical Information

#### Insulation Material

Class B Rating (standard)

Maximum Operating Temperature 130°C (266°F)

#### **Dielectric Strength**

50 Volts and Under: 500 VRMS Over 50 Volts: 1,000 VRMS

#### **Standard Voltages and Duty Cycles**

Voltage, DC - 6, 9, (std.) Duty Cycles - 100%, Pulse (std.) (Available by special order in other voltages and duty cycles.)



Plunger - .04 oz. Solenoid Total - .3 oz.

Plunger ("Shear Pin") Diameter 0.125" inch

#### Termination

Teflon Wire Leads 30 AWG (standard)

# **Dimensionals**



#### Note:

Interposer solenoids do not move an external load and so force/stroke performance curves are not applicable. The only work performed is the movement of the plunger against the force of the internal return spring and gravity.

	100% Duty – 2.5 Watts			Pulse Duty – 36 Watts	
Voltage	Resistance	Part Number	Voltage	Resistance	Part Number
6 VDC	14.4 OHMS	T12I0600	6 VDC	1.0 OHMS	T12I0601
9 VDC	32.4 OHMS	T12I0900	9 VDC	2.3 OHMS	T12I0901

#### Pulse Duty:

The duration of the power pulse should not exceed one second.

#### Note:

Available by special order in other voltages and duty cycles.