## **DC Push Tubular Solenoid**

# GUARDIAN

### Model TP8x16

#### **Features:**

High performance construction Available return spring kit DC applications only See T8x16 for pull applications UL recognized

#### **Electrical:**

Coil Voltages: 6, 12, 24, 48, 110 VDC standard

Coil Termination: 6.5" Wire leads 22 AWG (standard)

Duty Cycle: 100% Continuous, 25% Intermittent,

10% Intermittent, 1% Pulse

Coil treatment: Tape Wrapped Insulation Class: Class A Rating - 105° C (221° F)

Dielectric Strength: 1500V 60 Hz

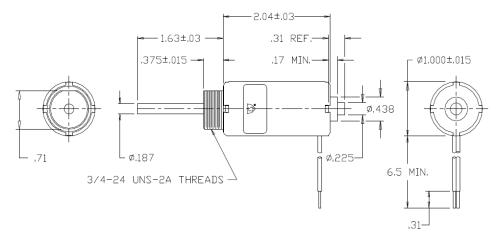
#### Mechanical:

Size: 2"(L) x 1"(D) Plunger Diameter: 0.187" Plunger Guide Material: Plastic Mounting: Hex Nut

Weight: Plunger 1.57 oz, Total 5.8 oz Life Expectancy: 1 Million Cycles<sup>1</sup>







#### Standard Part Numbers

Model	Part Number	Duty Cycle	Voltage	Resistance $^2$ ( $\Omega$ )	Power (W)	Current
TP8x16-C-12	A420-066662-00	Cont.	12VDC	28.3	5.3	424 mA
TP8x16-I-12	A420-066663-00	Inter.	12VDC	9.3	16.3	1.29 A
TP8x16-C-24	A420-066664-00	Cont.	24VDC	110	5.5	218 mA
TP8x16-I-24	A420-066665-00	Inter.	24VDC	36.1	16.8	665 mA

2 - Coil resistance tolerance +/- 5%

Contact us for custom voltages or duty cycles

Solenoid shown energized with plunger fully seated in extended position Supplied with mounting bracket, hex nut and lock washer shipped loose



#### **Available Customization:**

- Plunger
- Lead and Connector
- DC Voltage
- **Duty Cycle**
- Insulation systems up to class H 180° C (356° F) \* Minimum quantities apply

Typical Push Force Ounces [N] @ 20°C (68°F) (Distance from fully extended position)									HOLDING FORCE	Power (W)
Stroke (in.)	0.050	0.125	0.250	0.375	0.500	0.625	0.750	1.000	Ounces [N]	
Continuous 100%	24 [6.7]	14 [3.9]	9 [2.5]	4 [1.1]	3 [0.8]	2 [0.6]	1[0.3]	N/A	83 [23]	5.5
Intermittent 25%	48 [13.3]	32 [8.9]	20 [5.6]	14 [3.9]	12 [3.3]	8 [2.2]	6 [1.7]	N/A	100 [27.8]	16.5
Intermittent 10% <sup>3</sup>	93 [25.9]	68.5 [19]	50 [13.9]	41.5 [11.5]	31.5 [8.8]	28.5 [7.9]	25 [7]	17 [4.7]	261 [72.6]	48
Pulse 1%³	118 [32.8]	95 [26.4]	75 [20.9]	63 [17.5]	55 [15.3]	50 [13.9]	43 [12]	32 [8.9]	N/A	98.2

Optional Return **Spring Kit** A490-367460-11

Continuous Duty 100% = 100% On Time

Intermittent Duty 25% = 25% On Time (100 Seconds On Max Followed By 300 Seconds Off) Intermittent Duty 10% = 90% On Time (10 Seconds On Max Followed By 90 Seconds Off)
Pulse Duty 1% = 99% On Time (1 Second On Max Followed By 99 Seconds Off)

<sup>3</sup> - Calculated force values to be verified in application











<sup>&</sup>lt;sup>1</sup> - Dependent on load conditions