DC Push Tubular Solenoid

GUARDIAN

Model TP12x19

Features:

High performance construction Available return spring kit DC applications only See T12x19 for pull applications **RoHS Compliant UL** Recognized

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



Coil Voltages: 6, 12, 24, 48, 110 VDC 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: 2.43" (L) x 1.5"(D) Plunger Diameter: 0.187" Plunger Guide Material: Plastic

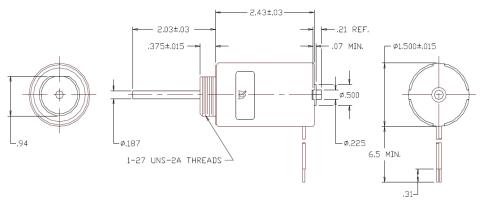
Mounting: Hex Nut

Weight: Plunger 2.2 oz, Total 14.2 oz Life Expectancy: 1 Million Cycles¹

¹ - Dependent on load conditions









| Model | Part Number | Duty Cycle | Voltage | Resistance ² (Ω) | Power (W) | Current |
|--------------|----------------|------------|---------|--------------------------------|--------------|---------|
| TP12x19-C-12 | A420-064104-04 | Cont. | 12VDC | 17.5 | 8.6 | 685 mA |
| TP12x19-I-12 | A420-064104-03 | Inter. | 12VDC | 5.6 | 27 | 2.15 A |
| TP12x19-C-24 | A420-064104-02 | Cont. | 24VDC | 68 | 8.9 | 353 mA |
| TP12x19-I-24 | A420-064104-01 | Inter. | 24VDC | 22.1 | 27.4 | 1.09 A |

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
- Termination
- 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% | 80 [22.2] | 48 [13.3] | 24 [6.7] | 16 [4.4] | 14 [3.9] | 12 [3.3] | 8 [2.2] | 6 [1.7] | 143 [39.8] | 8.6 |
| Intermittent 25% | 116 [32.2] | 88 [24.5] | 56 [15.6] | 40 [11.1] | 32 [8.9] | 28 [7.8] | 22 [6.1] | 16 [4.4] | 163 [45.3] | 27 |
| Intermittent 10% ³ | 220 [61.2] | 184 [51.2] | 145 [40.3] | 121 [33.6] | 102 [28.4] | 89 [24.7] | 73 [20.3] | 58 [16.1] | 546 [151.8] | 82.7 |
| Pulse 1%³ | 252 [70.1] | 218 [60.6] | 180 [50.] | 154 [42.8] | 137 [38.1] | 125 [34.8] | 108 [30.] | 80 [22.2] | N/A | 130.7 |

Optional Return Spring Kit A490-367460-09

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)

3 - Calculated force values to be verified in application









