

# DC Tubular Push Solenoid

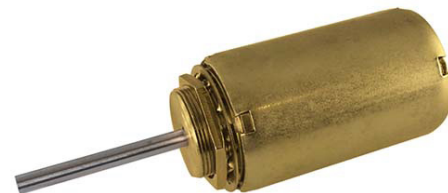
## Model TP12x19



1425 Lake Avenue, Woodstock, IL 60098

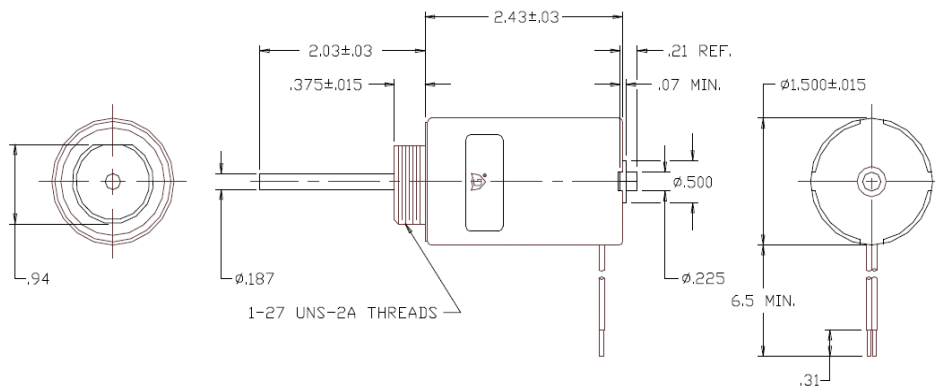
### Features:

- 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)



### Electrical:

- 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 Cycles<sup>1</sup>

<sup>1</sup> - Dependent on load conditions

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

### Standard Part Numbers

Model	Part Number	Duty Cycle	Voltage	Resistance <sup>2</sup> (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

<sup>2</sup> - Coil resistance tolerance +/- 5%

Contact us for custom voltages or duty cycles

### Available Customization:

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

Stroke (in.)	Typical Push Force Ounces [N] @ 20°C (68°F) (Distance from fully extended position)									HOLDING FORCE Ounces [N]	Power (W)
	0.050	0.125	0.250	0.375	0.500	0.625	0.750	1.000			
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% <sup>3</sup>	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% <sup>3</sup>	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)

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



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Information contained in this specification sheet subject to change without notice. Guardian Electric ©

