

# DC Tubular Push Solenoid

## Model TP12x13



1425 Lake Avenue, Woodstock, IL 60098

### Features:

- High performance construction
- Available return spring kit
- DC applications only
- See T12x13 for pull applications
- RoHS Compliant
- UL Recognized
- Coil Termination: 6.5" Wire leads
- 22 AWG (standard)



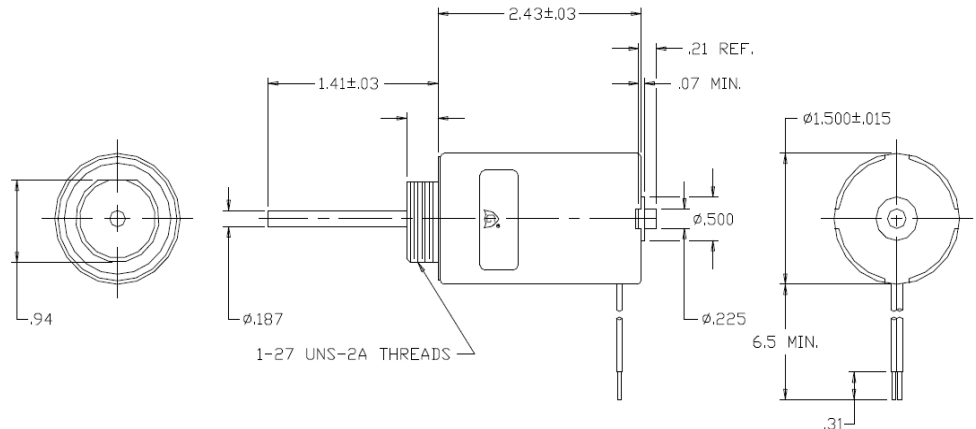
### Electrical:

- 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 1.7 oz, Total 10.2 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
TP12x13-C-12	A422-064103-04	Cont.	12VDC	22.8	6.6	526 mA
TP12x13-I-12	A422-064103-03	Inter.	12VDC	7.3	20.7	1.64 A
TP12x13-C-24	A422-064103-02	Cont.	24VDC	90.4	6.7	265 mA
TP12x13-I-24	A422-064103-01	Inter.	24VDC	28.4	21.3	845 mA

<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		
Continuous 100%	64 [17.8]	32 [8.9]	12 [3.36]	9 [2.5]	4 [1.1]	2 [0.6]	1 [0.3]	146 [40.6]	6.6
Intermittent 25%	112 [31.1]	84 [23.4]	44 [12.2]	28 [7.8]	16 [4.4]	12 [3.3]	5 [1.4]	168 [46.7]	21
Intermittent 10% <sup>3</sup>	203 [56.4]	163 [45.3]	125 [34.8]	90 [25]	60 [16.7]	35 [9.7]	25 [7.]	502 [139.6]	62
Pulse 1% <sup>3</sup>	281 [78.1]	260 [72.3]	220 [61.2]	178 [49.5]	137 [38.1]	92 [25.6]	62 [17.2]	N/A	198.2

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

Optional Return Spring Kit  
A490-367460-10



www.kelcoind.com

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

