DC Tubular Push Solenoid

Model TP12x13

GUARDIAN ELECTRIC
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)

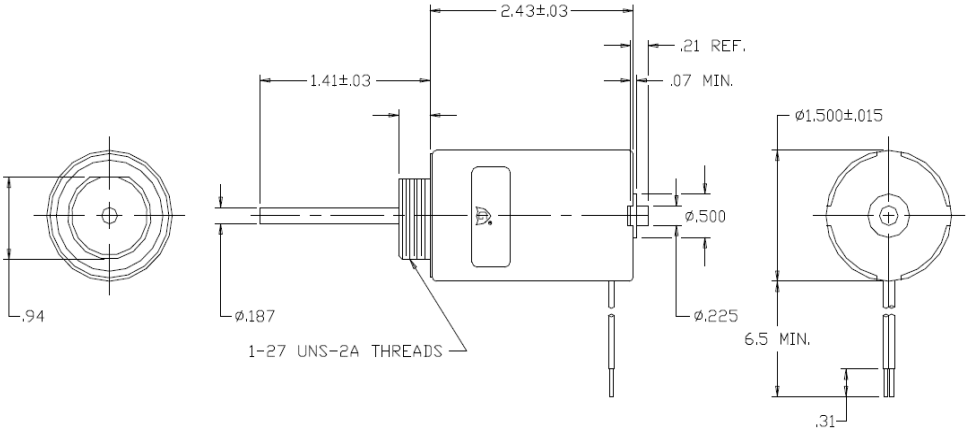
Electrical:

- 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[1]

[1] - 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[2] (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

2 - 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**

Typical Push Force Ounces [N] @ 20°C (68°F) (Distance from fully extended position)								HOLDING FORCE Ounces [N]	Power (W)
Stroke (in.)	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%[3]	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%[3]	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

Optional Return Spring Kit
A490-367460-10

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

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