DC Tubular Solenoid

GUARDIAN

1425 Lake Avenue, Woodstock, IL 60098

Features:

High performance construction Available return spring kit DC solenoid applications only See TP12x13 for push application **RoHS Compliant** UL recognized

Model T12x13

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

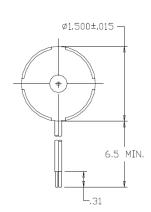
Mechanical:

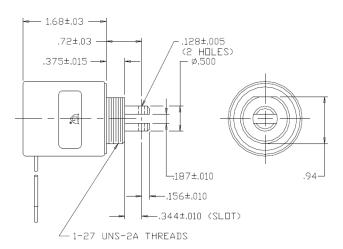
Size: 1.63" (L) x 1.5"(D) Plunger Diameter: 0.5 Plunger Guide Material: Plastic

Mounting: Hex Nut

Weight: Plunger 1.7 oz, Total 10.2 oz Life Expectancy: 1 Million Cycles¹

¹ - Dependent on load conditions





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

Standard Part Numbers

Model	Part Number	Duty Cycle	Voltage	Resistance² (Ω)	Power (W)	Current (mA)
T12x13-C-12D	A420-066051-00	Cont.	12VDC	22.8	6.6	526 mA
T12x13-I-12D	A420-066052-00	Inter.	12VDC	7.3	20.7	1.64 A
T12x13-C-24D	A420-066053-00	Cont.	24VDC	90.4	6.7	265 mA
T12x13-I-24D	A420-066054-00	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 Pull Force Ounces [N] @ 20°C (68°F) (Distance from fully seated position)									Power (W)
Stroke (in.)	0.050	0.125	0.250	0.375	0.500	0.625	0.750	Ounces [N]	
Continuous 100%	69 [22.2]	30 [11.1]	12 [5]	5 [2.8]	3 [1.4]	2 [0.6]	1 [0.3]	188 [52.3]	6.7
Intermittent 25%	140 [38.9]	104 [28.9]	55 [15.3]	30 [8.3]	20 [5.6]	15 [4.2]	7 [1.9]	215 [59.8]	21
Intermittent 10% ³	220 [61.2]	184 [51.2]	145 [40.3]	121 [33.6]	102 [28.4]	89 [24.7]	73 [20.3]	546 [151.8]	62
Pulse 1%³	252 [70.1]	218 [60.6]	180 [50]	154 [42.8]	137 [38.1]	125 [34.8]	108 [30]	N/A	198

Optional Return Spring Kit A490-367460-01

Continuous Duty 100% = 100% On Time Intermittent Duty 25% = 25% On Time (100 Sec On Max 300 Sec off) Intermittent Duty 10% = 90% On Time (10 Sec On Max 90 Sec off) Pulse Duty 1% = 99% On Time (1 Sec On Max 99 Sec off) 3 - Calculated force values to be verified in application



