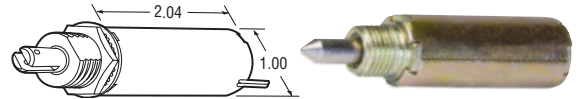


Tubular Solenoids

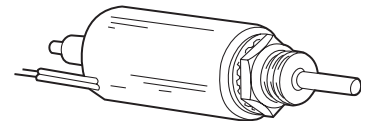
Tubular Solenoids are available for DC power applications. Continuous-duty units can be energized indefinitely. Intermittent-duty units offer higher pulling power, but can only be energized for a maximum of 180 seconds, and then they must cool for a minimum of 540 seconds. The middle letter of the Mfr.'s Type indicates the Continuous or Intermittent-duty cycle. Guardian tubulars come with mounting hardware, nut, and lockwashers.



Stock No.	Mfr.'s Type	Ohms	Lift (Oz.) and Stroke (In.)					Dia. (In.)	Length (In.)	Mounting Threads	Use with Spring Kit	EACH			
			0.05"	0.15"	0.25"	0.50"	1.0"					1-14	15-24	25-49	50-99
802-1154 802-1156	T3.5X9-C-12DC T4X7-I-24D	60.2 131.0	3 6	1 2	1 1	1 1	—	0.044 0.050	1.18 0.89	0.3125-32UNEF-2A 0.375-32UNEF-2A	T3.5X9-C-12DC T4X7-I-24D	11.47 7.17	11.01 6.89	10.58 6.62	9.59 6.48
802-1166 802-1167	T6X12-C-24D T6X12-I-12D	121.0 12.1	17 24	8 12	5 8	2 4	—	0.075 0.075	1.54 1.54	0.468-32UNEF-2A 0.468-32UNEF-2A	T6X12-C-24D T6X12-I-12D	11.86 11.86	11.38 11.38	10.94 10.94	10.69 10.69
802-0565 802-1168	T6X12-C-12D T8X9-I-24D	31.7 44.0	17 42	8 20	5 10	2 4	—	0.750 1.000	1.54 1.17	0.468-32UNEF-2A 0.75-24UNS-2A	T6X12-C-12D T8X9-I-24D	11.86 17.26	11.38 16.57	10.94 15.93	10.69 15.57
802-1170 802-1171	T8X16-I-24D T8X16-I-12D	36.1 9.3	60 60	35 35	15 15	15 15	8 8	1.000 1.000	2.04 2.04	0.75-24UNS-2A 0.75-24UNS-2A	T8X16-I-24D T8X16-I-12D	14.92 14.92	14.31 14.31	13.77 13.77	13.46 13.46
802-0573 802-1172	T8X16-C-12D T12X13-I-24D	28.3 28.4	38 140	15 90	11 55	8 15	4 —	1.000 1.500	2.04 1.68	0.75-24UNS-2A 1-27UNS-2A	T8X16-C-12D T12X13-I-24D	14.92 22.14	14.31 21.27	13.77 20.45	13.46 19.99
802-0010 802-0003	T12X19-I-12DC T12X19-C-12VDC	5.6 17.5	145 100	90 60	70 35	40 20	20 10	1.500 1.500	2.43 2.43	1-27UNS-2A 1-27UNS-2A	T12X19-I-12DC T12X19-C-12VDC	22.28 23.28	21.39 22.35	20.57 21.49	20.10 21.01
802-1174 802-1175	T12X19-I-24D T12X19-C-24D	22.1 68.0	145 100	90 60	70 35	40 20	20 10	1.500 1.500	2.43 2.43	1-27UNS-2A 1-27UNS-2A	T12X19-I-24D T12X19-C-24D	22.28 23.28	21.39 22.35	20.57 21.49	20.10 21.01

Guardian TP Push-Type

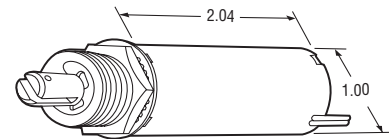
Push-type tubular solenoids are based on the standard tubular line, and are available for DC applications. The plunger pushes out of the body of the solenoid from the threaded end. Continuous-duty and Intermittent-duty cycles are the same as the tubular solenoids listed above.



Stock No.	Mfr.'s Type	Ohms	Lift (Oz.) and Stroke (In.)					Dia. (In.)	Length (In.)	Mounting Threads	Use with Spring Kit	EACH			
			0.05"	0.15"	0.25"	0.50"	1.0"					1-14	15-24	25-49	50-99
802-1161 802-1164	TP4X12-C-24D TP4X16-C-24D	195.0 173.0	4 5	1 2	1 1	1 1	— 1	1.50 2.01	1.50 2.01	0.375-32UNEF-2A 0.375-32UNEF-2A	TP4X12-C-24D TP4X16-C-24D	8.78 10.17	8.16 9.76	7.93 9.39	7.72 9.18
802-0055 802-1194	TP6X12-C-12VDC TP6X12-C-24D	31.7 121.0	17 17	8 8	5 5	2 2	— —	1.54 1.54	1.54 1.54	0.468-32UNEF-2A 0.468-32UNEF-2A	TP6X12-C-12VDC TP6X12-C-24D	12.87 12.87	12.34 12.34	11.87 11.87	11.58 11.58
802-0020 802-1000	TP8X16-C-12D TP8X16-C-24D	28.3 110.0	38 38	15 15	11 11	8 8	4 4	2.04 2.04	2.04 2.04	0.75-24UNS-2A 0.75-24UNS-2A	TP8X16-C-12D TP8X16-C-24D	17.06 17.80	16.36 17.09	15.74 16.43	15.39 16.05
802-1178 802-0006	TP12-X13-I-24D TP12X19-I-12VDC	28.4 5.6	140 145	90 95	55 70	15 40	— 20	1.68 2.43	1.68 2.43	1-27UNS-2A 1-27UNS-2A	TP12-X13-I-24D TP12X19-I-12VDC	26.94 29.46	25.83 27.55	24.83 26.69	24.27 25.89
802-0007 802-1176 802-1177	TP12X19-C-12VDC TP12X19-I-24D TP12X19-C-24D	17.5 22.1 68.0	100 145 100	60 95 60	35 70 35	20 40 20	10 20 10	2.43 2.43 2.43	2.43 2.43 2.43	1-27UNS-2A 1-27UNS-2A 1-27UNS-2A	TP12X19-C-12VDC TP12X19-I-24D TP12X19-C-24D	29.46 29.89 29.89	27.55 28.70 28.70	26.69 27.59 27.59	25.89 26.97 26.97

Long-Life Tubular Solenoids

Long-life tubular solenoids incorporate anti-bottoming features, a stainless steel plunger sleeve, and teflon coated plungers to increase mechanical life. The anti-bottoming ring and washers prevent the plunger from hitting the plug, eliminating destructive shock forces. The stainless steel plunger sleeve boosts life expectancy over standard phenolic cores. Teflon coating reduces friction between the plunger and the bobbin over the life of the solenoid, reducing plunger wear.



Stock No.	Mfr.'s Type	Ohms	Lift (Oz.) and Stroke (In.)					Dia. (In.)	Length (In.)	Mounting Threads	Use with Spring Kit	EACH			
			0.05"	0.15"	0.25"	0.50"	1.0"					1-14	15-24	25-49	50-99
802-0008 802-0009	LT6X12-I-12VDC LT6X12-C-12VDC	13.8 35.0	45 30	22 10	13 7	3 2	— —	0.75 0.75	1.54 1.54	0.468-32 UNEF-2A 0.468-32 UNEF-2A	LT6X12-I-12VDC LT6X12-C-12VDC	16.18 15.50	15.14 14.49	14.66 14.04	14.23 13.61
802-0011 802-0012	LT6X12-I-24VDC LT6X12-C-24VDC	53.8 138.0	45 30	22 10	13 7	3 2	— —	0.75 0.75	1.54 1.54	0.468-32 UNEF-2A 0.468-32 UNEF-2A	LT6X12-I-24VDC LT6X12-C-24VDC	15.49 15.50	14.49 14.49	14.04 14.04	13.61 13.61
802-0013 802-0014	LT8X16-I-12VDC LT8X16-C-12VDC	6.2 19.3	78 50	49 22	33 14	15 8	— —	1.00 1.00	2.04 2.04	0.75-24UNS-2A 0.75-24UNS-2A	LT8X16-I-12VDC LT8X16-C-12VDC	30.34 30.34	28.38 28.38	27.49 27.49	26.66 26.66
802-0016 802-0017	LT8X16-I-24VDC LT8X16-C-24VDC	29.7 77.2	78 50	49 22	33 14	15 8	— —	1.00 1.00	2.04 2.04	0.75-24UNS-2A 0.75-24UNS-2A	LT8X16-I-24VDC LT8X16-C-24VDC	30.34 30.34	28.38 28.38	27.49 27.49	26.66 26.66
802-0065 802-0075	LT12X19-I-24VDC LT12X19-C-24VDC	18.6 71.8	170 110	130 60	97 29	45 15	10 5	1.50 1.50	2.43 2.43	1-27UNS-2A 1-27UNS-2A	LT12X19-I-24VDC LT12X19-C-24VDC	35.44 35.44	34.01 34.01	32.71 32.71	31.97 31.97

Spring Kits for DC Tubular Solenoids

Stock No.	Mfr.'s Type	For Use With	EACH			
			1-24	25-49	50-99	100-249
802-0048	A490-367460-08	Model T3.5x9	6.70	6.51	6.12	5.77
802-0047	A490-367460-07	Model 22	6.70	6.51	6.12	5.77
802-0046	A490-367460-04	Model T6X12	8.93	8.68	8.16	7.70
802-0044	A490-367460-03	Model T8X9	10.05	9.76	9.18	8.67
802-0043	A490-367460-02	Model T8X16	11.73	11.40	10.72	10.11
802-0042	A490-367460-01	Model T12X13	13.97	13.57	12.76	12.03
802-0004	A490-367460-00	Model T12X19	13.97	13.57	12.76	12.03

Spring Kits for DC Push-Type Tubular Solenoids

Stock No.	Mfr.'s Type	For Use With	EACH			
			1-24	25-49	50-99	100-249
802-0051	A490-367460-15	Model TP4X12	6.70	6.51	6.12	5.77
802-0064	A490-367490-14	Model TP4X16	6.00	5.83	5.48	5.17
802-0050	A490-367460-13	Model TP6X12	8.93	8.68	8.16	7.70
802-0063	A490-367490-11	Model TP8X16	10.50	10.20	9.59	9.05
802-0062	A490-367490-10	Model TP12X13	12.50	12.14	11.42	10.77
802-0049	A490-367460-09	Model TP12X19	13.97	13.57	12.76	12.03

Spring Kits for DC Long Life Tubular Solenoids

Stock No.	Mfr.'s Type	For Use With	EACH			
			1-24	25-49	50-99	100-249
802-0054	A490-367460-22	Model LT6X12	8.93	8.68	8.16	7.70
802-0053	A490-367460-20	Model LT8X16	11.73	11.40	10.72	10.11
802-0052	A490-367460-18	Model LT12X19	13.97	13.57	12.76	12.03