

Stepping Solenoid

General Specifications



Performance

12 POSITION 30° STEPS

CONSTANT FRICTION TORQUE mNm	COIL TEMPERATURE	NORMAL SPEED						MAXIMUM SPEED					
		EXTENDED PERIOD OF OPERATION (1 MIN OR MORE)						SHORT PERIOD OF OPERATION (1 MIN OR LESS)					
		25% ED			10% ED			1720 AT			2730 AT		
		PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC
55	20°C	35	105	7	24	216	4	35	26	16	24	26	20
115	20°C	40	120	6	27	243	3	40	26	15	27	26	18
170	20°C	45	135	5	30	270	3	45	26	14	30	26	17
230	20°C				32	288	3				32	26	17
285	20°C				35	315	2				35	26	16
340	20°C				38	342	2				38	26	15
400	20°C				42	398	2				42	26	14

18 POSITION 20° STEPS

CONSTANT FRICTION TORQUE mNm	COIL TEMPERATURE	CONTINUOUS DUTY						INTERMITTENT DUTY					
		NORMAL SPEED 1 MINUTE PLUS OPERATION						MAXIMUM SPEED 1 MINUTE MAX. DURATION					
		25% ED			10% ED			1720 AT			2730 AT		
		PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC
55	20°C	30	90	8	22	198	4	30	18	20	22	18	26
115	20°C	35	105	7	25	225	4	35	18	18	25	18	23
170	20°C	40	120	6	28	252	3	40	18	17	28	18	21
230	20°C	45	135	5	30	270	3	45	18	15	30	18	20
285	20°C				33	297	3				33	18	19
340	20°C				35	315	2				35	18	18
400	20°C				40	360	2				40	18	17
450	20°C				42	398	2				42	18	16

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24 POSITION 15° STEPS

CONSTANT FRICTION TORQUE mNm	COIL TEMPERATURE	CONTINUOUS DUTY						INTERMITTENT DUTY					
		NORMAL SPEED 1 MINUTE PLUS OPERATION			MAXIMUM SPEED 1 MINUTE MAX. DURATION								
		25% ED		10% ED	1720 AT		2730 AT						
		PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC
55	20°C	26	78	9	20	180	5	26	16	23	20	16	27
115	20°C	32	96	7	23	207	4	32	16	20	23	16	25
170	20°C	38	114	6	26	234	3	38	16	18	26	16	23
230	20°C	42	126	5	28	252	3	42	16	17	28	16	22
260	20°C	45	135	5	30	270	3	45	16	16	30	16	21
285	20°C				32	288	3				32	16	20
340	20°C				34	306	3				34	16	20
400	20°C				38	342	3				38	16	18
450	20°C				40	360	2				40	16	17
520	20°C				42	378	2				42	16	17

36 POSITION 10° STEPS

CONSTANT FRICTION TORQUE mNm	COIL TEMPERATURE	CONTINUOUS DUTY						INTERMITTENT DUTY					
		NORMAL SPEED 1 MINUTE PLUS OPERATION			MAXIMUM SPEED 1 MINUTE MAX. DURATION								
		25% ED		10% ED	1720 AT		2730 AT						
		PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC	PULSE ON TIME MILLISECS	OFF TIME MILLISECS	STEPS/SEC
55	20°C	20	60	12	17	144	6	20	20	25	16	24	25
115	20°C	24	72	10	18	162	5	24	20	22	18	24	23
170	20°C	28	84	8	19	171	5	28	20	20	19	24	23
230	20°C	36	108	8	20	189	4	36	20	17	21	24	22
285	20°C	40	120	6	23	207	4	40	20	18	23	24	21
340	20°C	45	135	5	25	225	4	45	20	15	25	24	20
400	20°C				27	243	3				27	24	19
450	20°C				30	270	3				30	24	18
520	20°C				32	288	3				32	24	17
580	20°C				35	315	2				35	24	16
630	20°C				38	342	2				38	24	16
690	20°C				42	398	2				42	24	15

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Coil Data

Coil Data			NORMAL SPEED		MAXIMUM SPEED	
Coil AWG Number	OHMS @ 20°C	Number of Turns	25% Duty Voltage DC	10% Duty Voltage DC	1720 ATS Voltage DC	2730 ATS Voltage DC
19	0.31	110	4.9	7.8	4.9	7.8
20	0.43	125	6.0	9.5	6.0	9.5
21	0.74	168	7.6	12.1	7.6	12.1
22	1.26	224	9.7	15.4	9.7	15.4
23	2.03	288	12.1	19.2	12.1	19.2
24	3.20	360	15.3	24.0	15.3	24.0
25	4.91	440	19.2	31.0	19.2	31.0
26	7.72	550	24.0	38.0	24.0	38.0
27	11.10	636	30.0	48.0	30.0	48.0
28	18.80	840	39.0	61.0	39.0	61.0
29	30.50	1088	48.0	77.0	48.0	77.0
30	44.90	1275	61.0	96.0	61.0	96.0
31	70.90	1596	76.0	120.0	76.0	120.0
32	109.00	1974	95.0	150.0	95.0	150.0
33	175.00	2496	120.0	192.0	120.0	192.0
34	270.00	3042	152.0	242.0	152.0	242.0
35	414.00	3600	198.0	314.0	198.0	314.0
36	600.00	4200	250.0	397.0	250.0	397.0

Specifications

Vibration	10g 2000 Hz	Weight Uni-directional	400g
Shock	50g 8.5 ms	Weight Bi-directional	680g
Temperature shock	-55°C...+85°C	Mechanism torque	T = 12 100 mNm
Temperature range	-55°C...+80°C		T = 18 140 mNm
Maximum coil temperature	+120°C		T = 24 180 mNm
Humidity	95% @ 50°C, 48 hours		T = 36 240 mNm
Minimum life	10 million steps	Angular tolerance	
Proof voltage	AWG 19 - 23 1000 Vrms	non accumulative	±1°
	AWG 24 - 34 1200 Vrms		
	AWG 35 - 36 1500 Vrms		

Series 50L Ordering Codes

288	<input type="text"/>	50 -	<input type="text"/>	<input type="text"/> <input type="text"/>	- 001	- 0	<input type="text"/> <input type="text"/>
	Mounting Method		Direction		Number of Steps		Coil AWG
	5 - Mounting Studs		1 - Uni-directional		12 - 12 Steps		
	6 - Flange Mounting		2 - Bi-directional		18 - 18 Steps		
	7 - Foot Mounting				24 - 24 Steps		
					36 - 36 Steps		

Example: Bi-directional, 24 Steps, 24 AWG Coil, Flange Mounting

Order Code: 288650 - 224 - 001 - 024

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