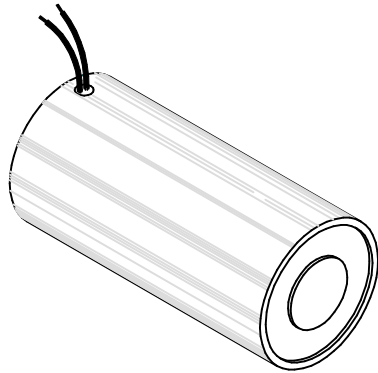


# MAGNETIC SENSOR SYSTEMS

## *Tubular Electromagnet*



**Series E-20-100**  
**1" DIA X 1.94"**  
**[25.4 mm X 49.3 mm]**

**TOTAL WEIGHT: 5.3 OUNCES [150 GR]**

duty cycle	1 (100%)	1/2 (50%)	1/4 (25%)	1/10 (10%)
maximum "ON" time, (Sec.)	$\infty$	600	120	30
watts	4	8	16	40
approximate ampere turns	640	905	1280	2025

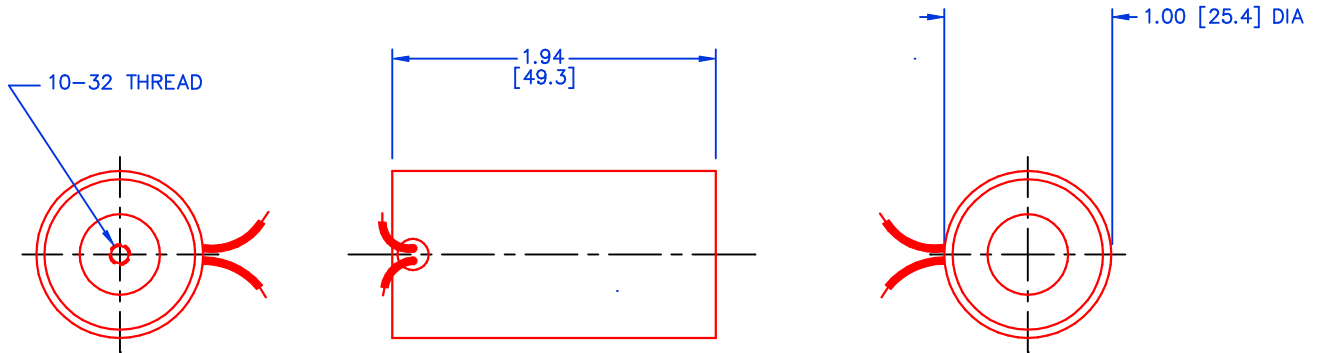
AWG number	resistance ( $\Omega$ )	volts DC	volts DC	volts DC	volts DC
22	1.1	2.2	3.2	4.5	7.1
23	1.5	2.3	3.3	4.6	7.3
24	2.9	3.4	4.9	6.9	10.9
25	4.0	3.8	5.4	7.6	12.1
26	7.1	5.5	7.8	11.0	18.0
27	9.9	6.1	9.0	12.2	19.4
28	17.1	9.0	12.4	18.0	27.7
29	27.5	10.5	14.9	21.1	33.3
30	46.2	13.3	18.8	26.6	42.0
31	72.0	16.2	24.0	32.3	51.1
32	110	20.7	30.0	41.4	65.5
33	175	27.7	39.1	55.3	87.5
34	270	33.4	48.0	66.7	106
35	450	42.5	60.1	85.0	134
36	665	52.5	74.3	105	166
37	1040	64.9	91.8	130	205
38	1550	81.5	120	163	258
39	2750	120	166	235	371

HEAT SINK: For proper heat dissipation, body of electromagnet should be mounted on an equivalent of 4.0" x4.0" x 1/8" metal plate in an unrestricted flow of air.

# MAGNETIC SENSOR SYSTEMS

E-20-100

MECHANICAL DIMENSIONS



TOLERANCES: (UNLESS NOTED)  
 0.XXX:  $\pm 0.005$   
 0.XX :  $\pm 0.010$   
 X/X:  $\pm 1/64$   
 COIL RESISTANCE:  $\pm 10\%$   
 DIMENSIONS IN INCHES [mm]

TYPICAL HOLD FORCE VERSUS INPUT POWER

