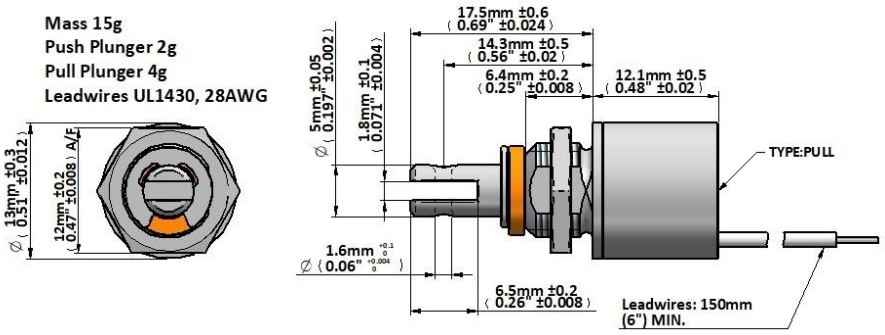
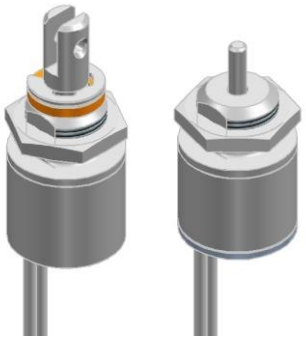
TUBULAR SOLENOIDS

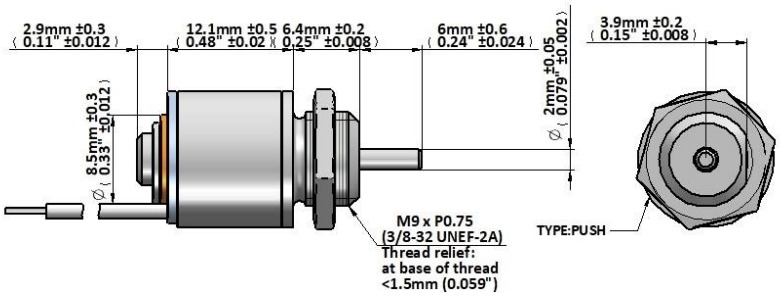
GEEPLUS Tubular Solenoid size 133

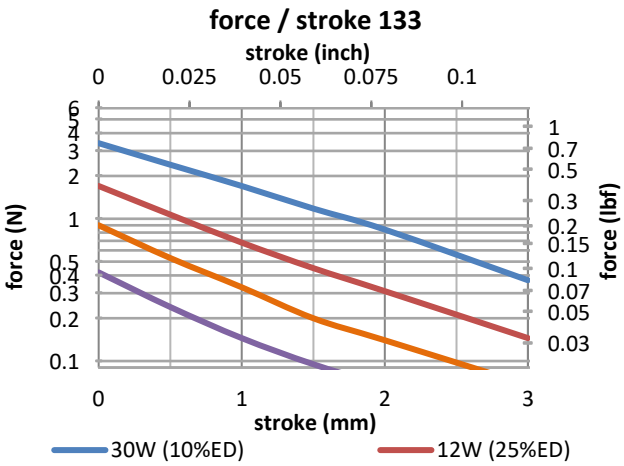
Device drawn in energised condition
Available plunger options:
pull (-Lx) / push (-Hx)
Life Expectancy (cycles):
>2M (-L, ;-H),
>5M (-LE, ;-HE),
>10M (-LL, -HL)
Available mechanical options:
M: metric thread
F: SAE thread

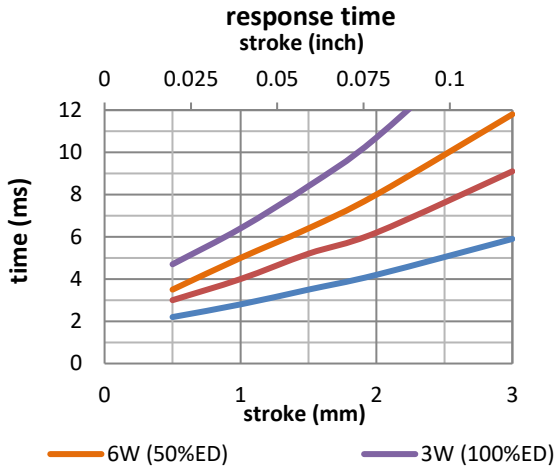
Mass 15g
Push Plunger 2g
Pull Plunger 4g
Leadwires UL1430, 28AWG











Data at 20°C , device connected to heatsink 50x50x3mm aluminum

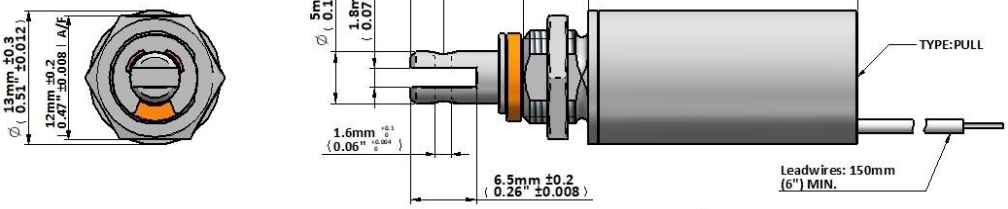
duty cycle = "on" time / ("on" time + "off" time) x 100%			100% cont.	50% or less	25% or less	10% or less
Max. "on" time in seconds			∞	38	4	1
watts at 20°C			3	6	12	30
ampere-turns at 20°			232	330	465	735
AWG no.	**resistance Ω±10% (at 20°C)**	**number of turns**	**volts DC**			
29	1.0	141	1.7	2.4	3.4	5.0
30	1.6	175	2.0	3.0	4.3	7.0
31	2.5	217	2.7	3.8	5.4	9.0
32	3.9	268	3.4	4.8	7.0	11
33	6.1	332	4.3	6.0	9.0	14
34	9.5	410	5.4	7.7	11	17
35	14.8	506	6.8	10	14	22
36	23.0	625	8.5	12	17	27
37	35.8	770	10.8	15	22	34
38	55.7	949	13.6	19	27	43
39	86.5	1169	17.0	24	34	54
40	134	1440	21.6	31	43	68
41	209	1774	27.0	39	55	87
42	324	2184	34.5	49	69	109
43	503	2688	43.5	62	87	137

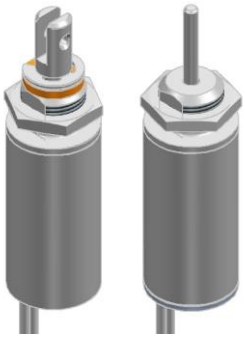
Insulation Resistance >100MΩ, 500VDC Megger
Dielectric Strength 1000VAC, 50/60Hz, 1 minute
Class E (120°C) insulation class

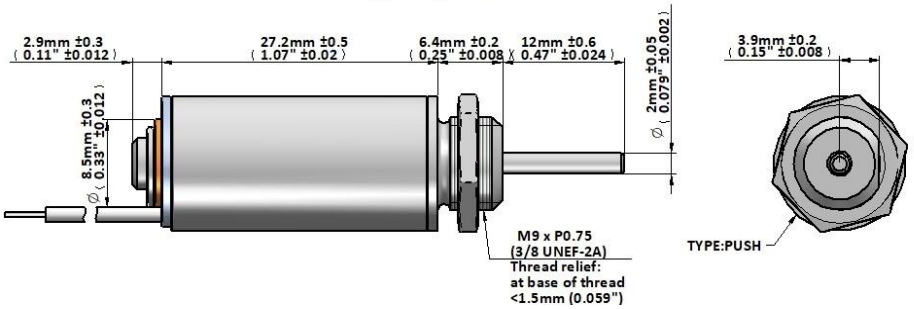
GEEPLUS Tubular Solenoid size 130

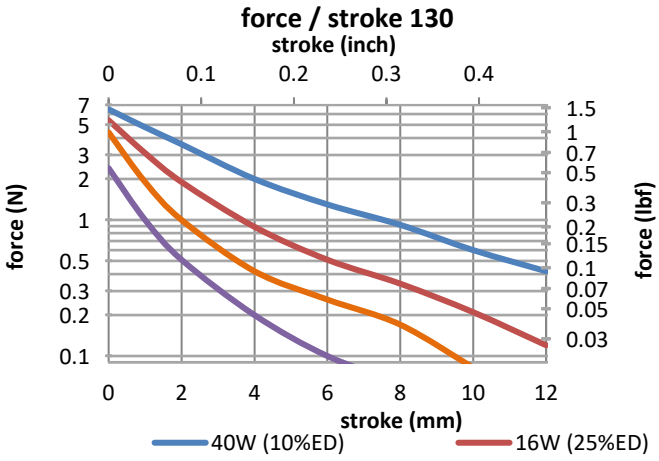
Device drawn in energised condition
Available plunger options:
pull (-Lx) / push (-Hx)
Life Expectancy (cycles):
>2M (-L, ;-H),
>5M (-LE, ;-HE),
>10M (-LL, -HL)
Available mechanical options:
M: metric thread
F: SAE thread

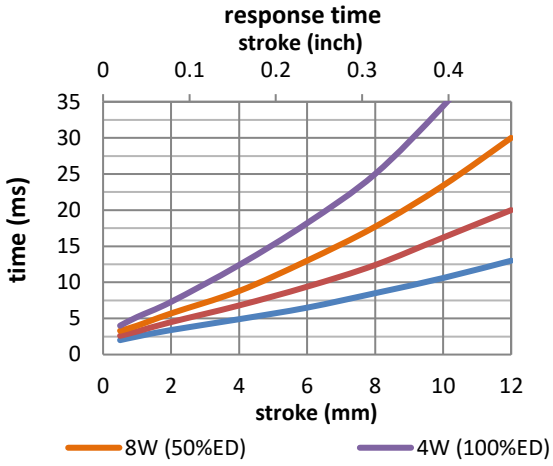
Mass 24g
Push Plunger 4g
Pull Plunger 5g
Leadwires UL1430, 28AWG











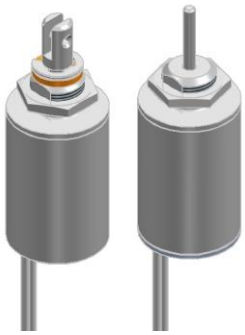
Data at 20°C , device connected to heatsink 50x50x3mm aluminum

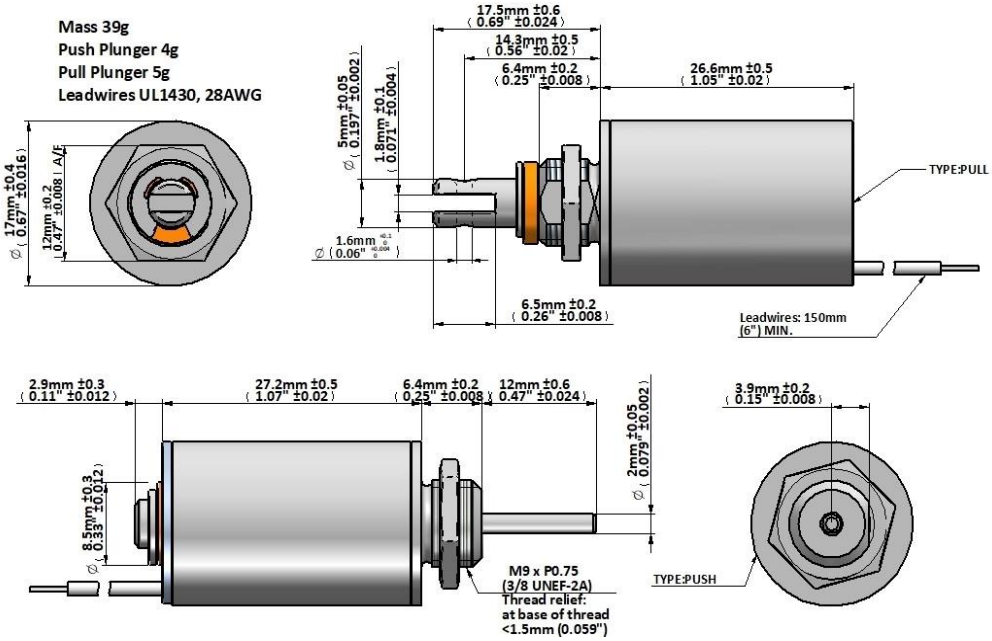
duty cycle = "on" time / ("on" time + "off" time) x 100%			100% cont.	50% or less	25% or less	10% or less
Max. "on" time in seconds			∞	50	5	2
watts at 20°C			4	8	16	40
ampere-turns at 20°			453	640	905	1440
AWG no.	**resistance Ω±10% (at 20°C)**	**number of turns**	**volts DC**			
29	2.68	372	3.3	4.5	6.5	10.4
30	3.94	426	4.2	5.9	8.4	13.3
31	7.36	632	5.3	7.4	10.5	16.8
32	10.1	704	6.5	9.2	13.0	21
33	18.1	990	8.3	11.7	16.5	26
34	25.6	1100	10.6	14.9	21	34
35	44.2	1500	13.6	19.2	27	43
36	71.3	1932	16.9	24	34	54
37	99.0	2170	21	29	41	66
38	159.5	2768	26	37	52	83
39	300	3980	34	48	68	109
40	469	4884	44	61	87	138
41	709	6024	53	75	107	170
42	1152	7784	67	95	134	213
43	1780	9330	87	112	173	275

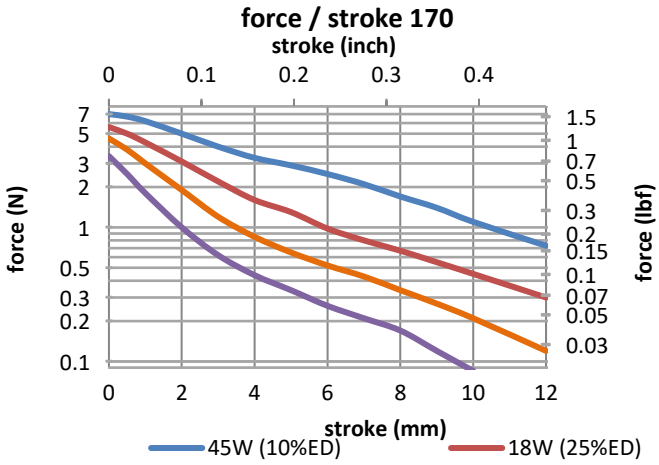
Insulation Resistance >100MΩ, 500VDC Megger
Dielectric Strength 1000VAC, 50/60Hz, 1 minute
Class E (120°C) insulation class

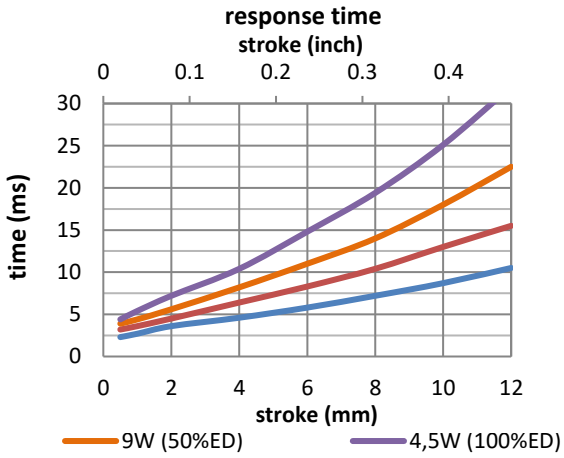
GEEPLUS Tubular Solenoid size 170

Device drawn in energised condition
Available plunger options:
pull (-Lx) / push (-Hx)
Life Expectancy (cycles):
>2M (-L, ;-H),
>5M (-LE, ;-HE),
>10M (-LL, -HL)
Available mechanical options:
M: metric thread
F: SAE thread









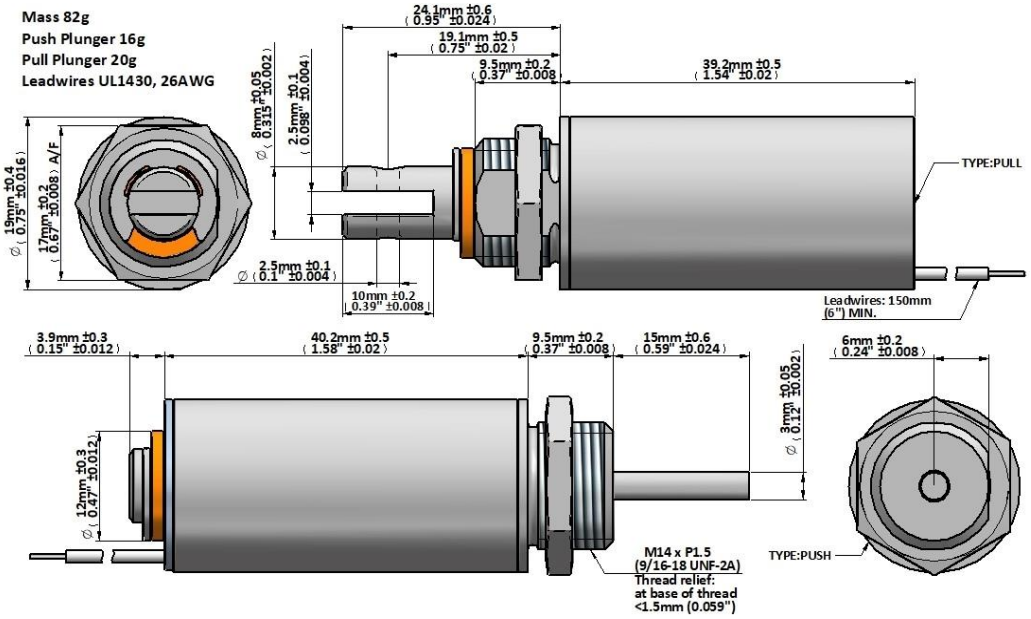
Data at 20°C , device connected to heatsink 50x50x3mm aluminum

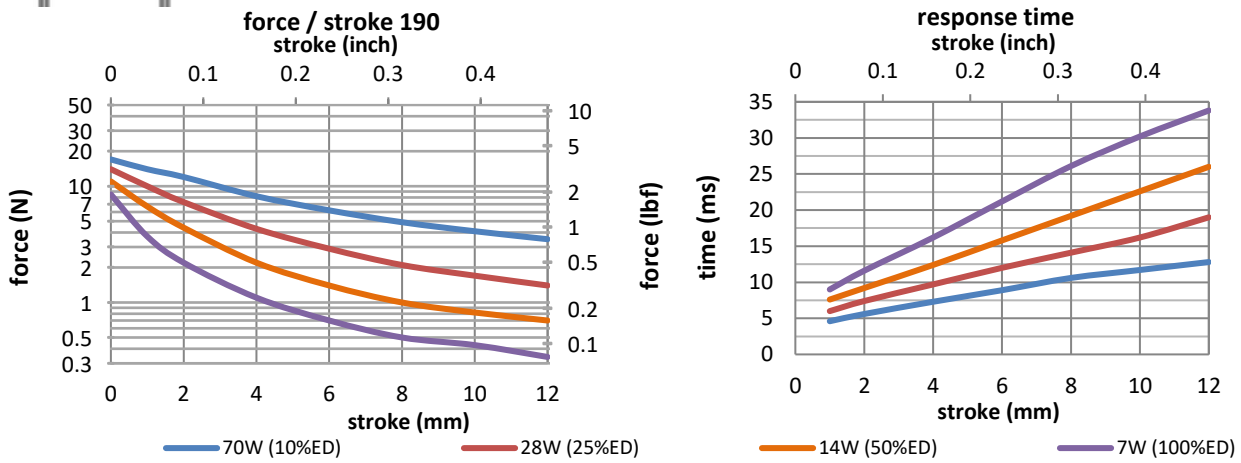
duty cycle = "on" time / ("on" time + "off" time) x 100%			100% cont.	50% or less	25% or less	10% or less
Max. "on" time in seconds			∞	50	5	2
watts at 20°C			4.5	9	18	45
ampere-turns at 20°			631	892	1262	1995
AWG no.	**resistance Ω±10% (at 20°C)**	**number of turns**	**volts DC**			
27	2.83	520	3.4	4.9	6.9	10.9
28	4.90	695	4.4	6.3	8.9	14.1
29	6.59	760	5.5	7.7	10.9	17.3
30	11.0	985	7.0	10.0	14.1	22
31	18.0	1246	9.1	12.9	18.2	29
32	28.2	1580	11.3	15.9	23	36
33	46.3	2080	14.0	19.9	28	44
34	69	2460	17.6	25	35	56
35	119	3260	23	33	46	73
36	177	3700	30	43	60	95
37	280	5000	35	50	71	112
38	408	6000	43	61	86	136
39	715	8080	56	79	112	177
40	1108	9700	72	102	144	228
41	1763	12000	93	131	185	293

Insulation Resistance >100MΩ, 500VDC Megger
Dielectric Strength 1000VAC, 50/60Hz, 1 minute
Class E (120°C) insulation class

GEEPLUS Tubular Solenoid size 190

Device drawn in energised condition
Available plunger options:
pull (-Lx) / push (-Hx)
Life Expectancy (cycles):
>2M (-L, ;-H),
>5M (-LE, ;-HE),
>10M (-LL, -HL)
Available mechanical options:
M: metric thread
F: SAE thread





Data at 20°C , device connected to heatsink 80x80x3mm aluminum

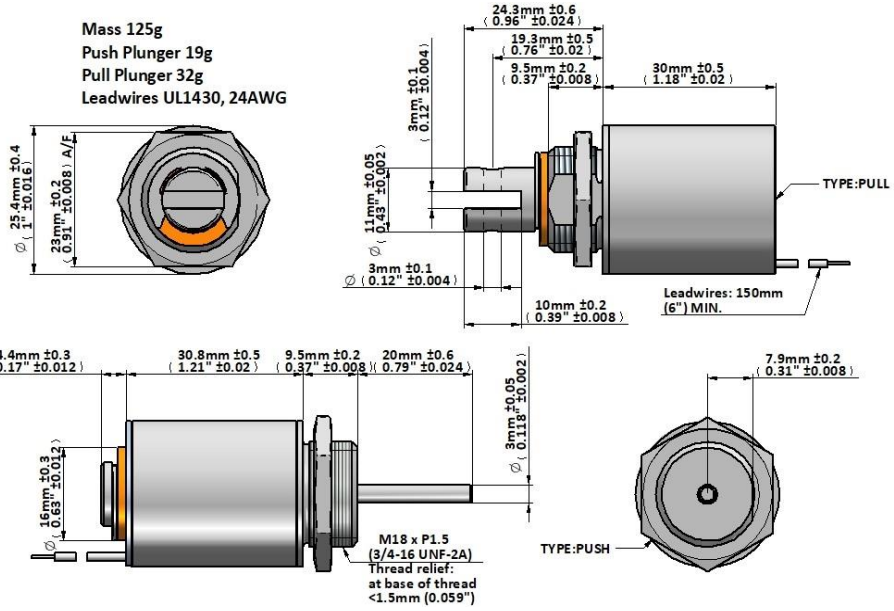
duty cycle = "on" time / ("on" time + "off" time) x 100%			100% cont.	50% or less	25% or less	10% or less
Max. "on" time in seconds			∞	230	25	6
watts at 20°C			7	14	28	70
ampere-turns at 20°			760	1075	1520	2403
AWG no.	resistance Ω±10% (at 20°C)	number of turns	volts DC			
25	1.65	372	3.4	4.9	6.9	10.9
26	3.10	551	4.4	6.2	8.7	13.8
27	4.33	615	5.4	7.7	10.9	17.2
28	7.78	870	6.9	9.8	13.8	22
29	10.7	960	8.6	12.2	17.2	27
30	18.6	1308	11.0	15.6	22	35
31	30.9	1722	13.9	19.6	28	44
32	41.6	1890	17	24	34	54
33	69.0	2448	22	31	44	69
34	110	3060	28	39	56	88
35	176	3860	35	50	70	111
36	266	4686	44	62	88	139
37	435	6214	54	77	109	172
38	658	7420	69	97	137	217
39	1135	9792	90	127	180	284
40	1815	12210	115	162	229	362

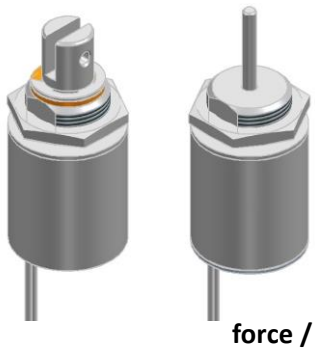
Insulation Resistance >100MΩ, 500VDC Megger
Dielectric Strength 1000VAC, 50/60Hz, 1 minute
Class E (120°C) insulation class

GEEPLUS Tubular Solenoid size 253

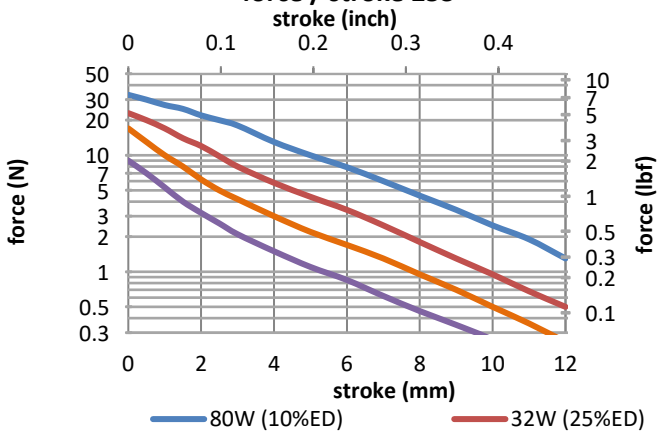
Device drawn in energised condition
Available plunger options:
pull (-Lx) / push (-Hx)
Life Expectancy (cycles):
>2M (-L, ;-H),
>5M (-LE, ;-HE),
>10M (-LL, -HL)
Available mechanical options:
M: metric thread
F: SAE thread

Mass 125g
Push Plunger 19g
Pull Plunger 32g
Leadwires UL1430, 24AWG

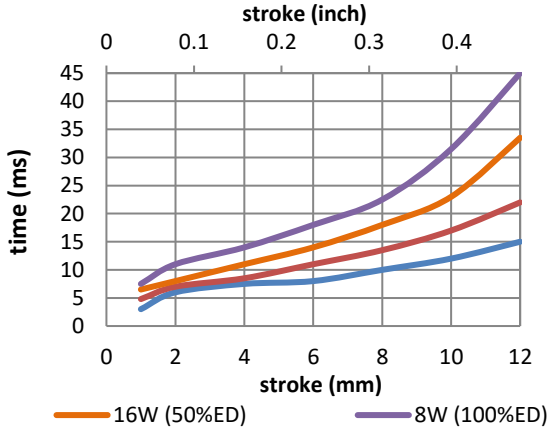




force / stroke 253



response time



Data at 20°C , device connected to heatsink 100x100x3mm aluminum

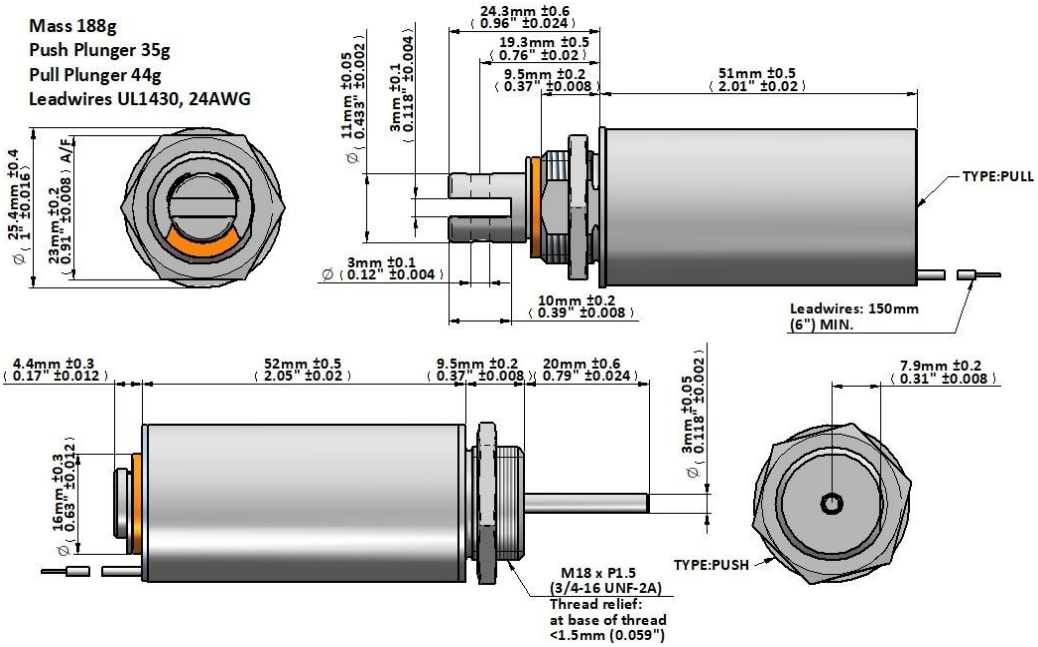
duty cycle = "on" time / ("on" time + "off" time) x 100%			100% cont.	50% or less	25% or less	10% or less
Max. "on" time in seconds			∞	360	32	8
watts at 20°C			8	16	32	80
ampere-turns at 20°			666	942	1332	2106
AWG no.	resistance Ω±10% (at 20°C)	number of turns	volts DC			
25	1.91	328	3.9	5.5	7.8	12.3
26	3.49	460	5.1	8.7	12.3	19.4
27	4.79	520	6.1	8.7	12.3	19.4
28	8.27	696	7.9	11.2	15.8	25
29	14.7	910	10.8	15.2	22	34
30	18.6	1020	12.1	17.2	24	38
31	31.3	1360	15.3	22	31	48
32	50.3	1620	21	29	41	65
33	76.8	2060	25	35	50	79
34	121	2570	31	44	63	99
35	207	3350	41	58	82	130
36	308	4100	50	71	100	158
37	490	5100	64	91	128	202
38	720	6000	80	113	160	253
39	1320	8550	103	145	206	325
40	2040	10500	129	183	259	409

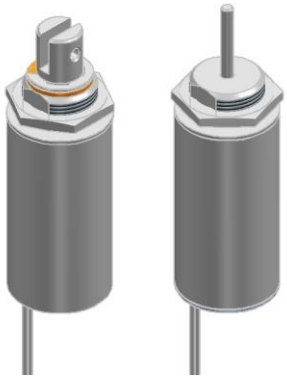
Insulation Resistance >100MΩ, 500VDC Megger
Dielectric Strength 1000VAC, 50/60Hz, 1 minute
Class E (120°C) insulation class

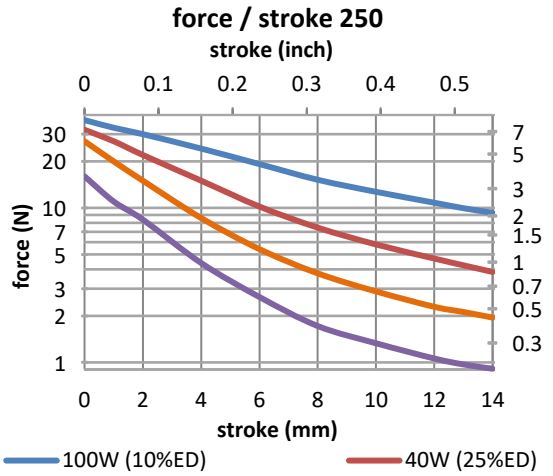
GEEPLUS Tubular Solenoid size 250

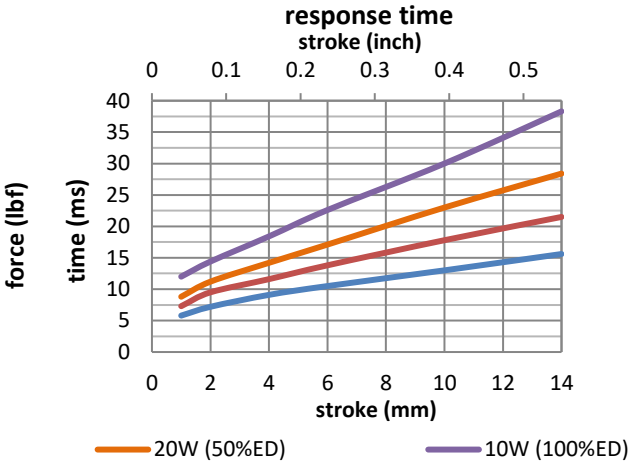
Device drawn in energised condition
Available plunger options:
pull (-Lx) / push (-Hx)
Life Expectancy (cycles):
>2M (-L, ;-H),
>5M (-LE, ;-HE),
>10M (-LL, -HL)
Available mechanical options:
M: metric thread
F: SAE thread

Mass 188g
Push Plunger 35g
Pull Plunger 44g
Leadwires UL1430, 24AWG









100W (10%ED) 40W (25%ED) 20W (50%ED) 10W (100%ED)

Data at 20°C , device connected to heatsink 100x100x3mm aluminum

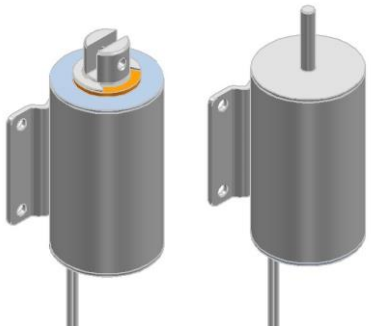
duty cycle = "on" time / ("on" time + "off" time) x 100%	100% cont.	50% or less	25% or less	10% or less
Max. "on" time in seconds	∞	360	32	8
watts at 20°C	10	20	40	100
ampere-turns at 20°	1090	1541	2180	3447

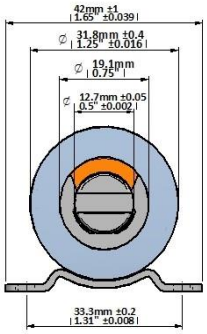
AWG no.	resistance Ω±10% (at 20°C)	number of turns	volts DC			
23	1.49	402	4.1	5.8	8.2	13.0
24	2.87	600	5.2	7.4	10.4	16.4
25	3.98	672	6.6	9.3	13.1	21
26	7.06	940	8.3	11.7	16.6	26
27	9.8	1050	10.4	14.6	21	33
28	16.9	1415	13.2	18.6	26	42
29	27.0	1820	16.4	23	33	52
30	45.0	2365	21	30	42	66
31	71.6	2990	26	37	53	84
32	107	3660	32	46	65	102
33	172	4550	42	59	83	132
34	265	5550	53	75	106	167
35	443	7310	67	95	134	212
37	1032	11000	104	147	207	328
38	1535	12930	131	185	262	415

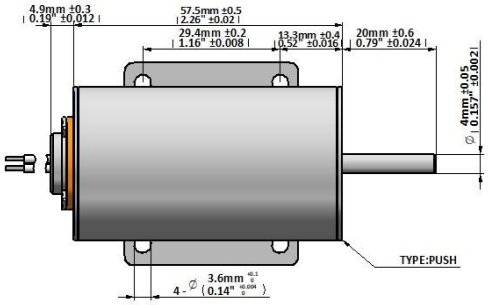
Insulation Resistance >100MΩ, 500VDC Megger
Dielectric Strength 1000VAC, 50/60Hz, 1 minute
Class E (120°C) insulation class

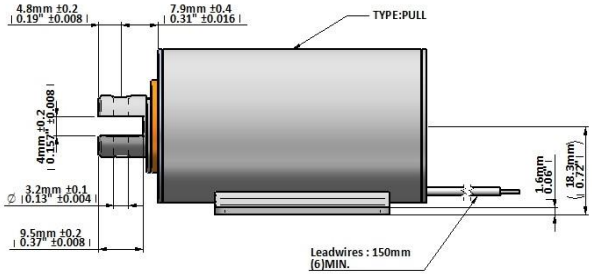
Device drawn in energised condition
Available plunger options:
pull (-Lx) / push (-Hx)
Life Expectancy (cycles):
>2M (-L, ;-H),
>5M (-LE, ;-HE),
>10M (-LL, -HL)
Available mechanical options:
M: metric thread
F: SAE thread

Mass 299g
Push Plunger 53g
Pull Plunger 54g
Leadwires UL1430, 22AWG

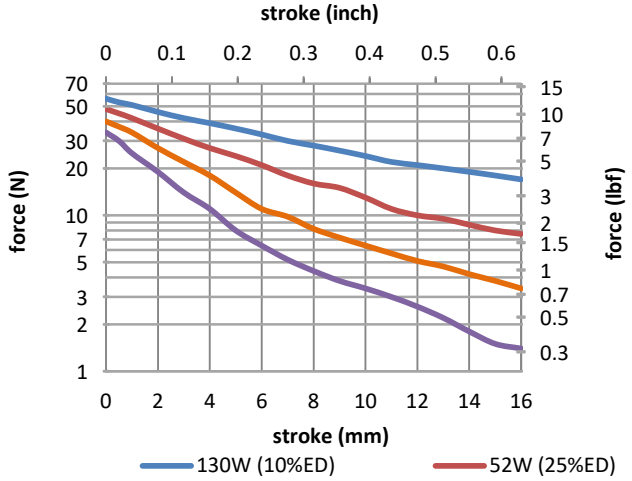




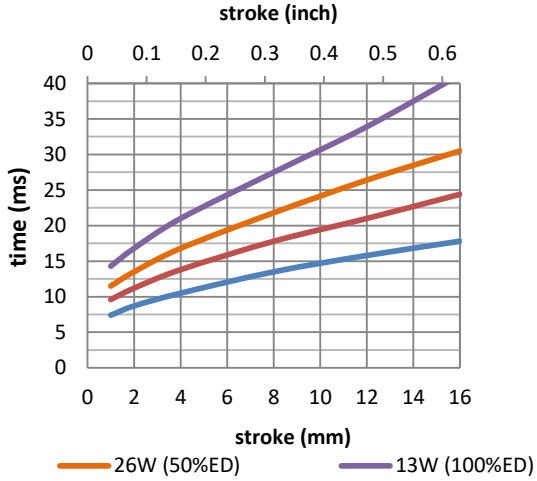




force / stroke 320



response time



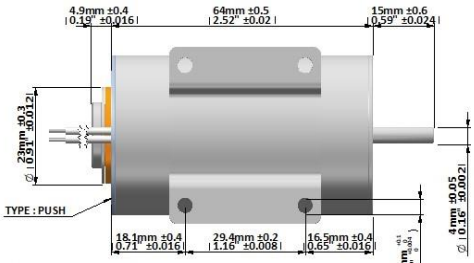
Data at 20°C , device connected to heatsink 130x130x3mm aluminum

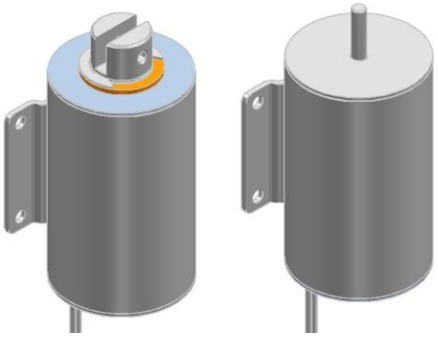
duty cycle = "on" time / ("on" time + "off" time) x 100%			100% cont.	50% or less	25% or less	10% or less
Max. "on" time in seconds			∞	390	60	18
watts at 20°C			13	26	52	130
ampere-turns at 20°			1500	2121	3000	4743
AWG no.	resistance Ω±10% (at 20°C)	number of turns	volts DC			
21	1.40	496	4.3	6.1	8.6	13.5
22	2.52	700	5.4	7.7	10.9	17.2
23	3.52	780	6.8	9.6	13.6	22
24	6.04	1056	8.6	12.2	17.2	27
25	8.5	1176	10.9	15.4	22	34
26	14.1	1540	13.8	19.5	28	44
27	22.5	1970	17.3	24	35	55
28	36.1	2484	22	31	44	69
29	55.1	3060	27	38	54	86
30	88.1	3805	35	49	70	110
31	147	5044	44	62	88	139
32	214	5992	54	76	107	170
33	354	7744	69	98	138	218
34	566	9730	88	124	175	277
35	900	12200	111	157	222	351
36	1310	14150	139	197	278	440
37	2060	18100	172	243	344	544

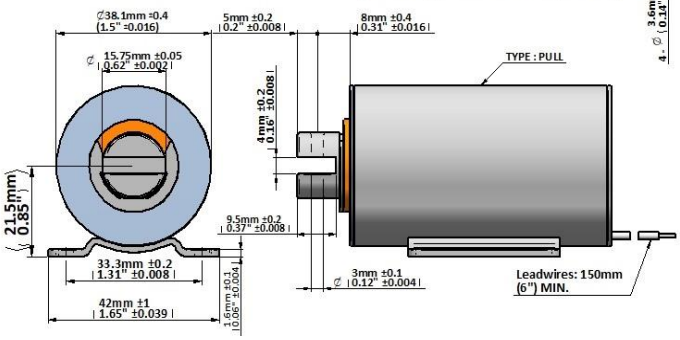
Insulation Resistance >100MΩ, 500VDC Megger
Dielectric Strength 1000VAC, 50/60Hz, 1 minute
Class E (120°C) insulation class

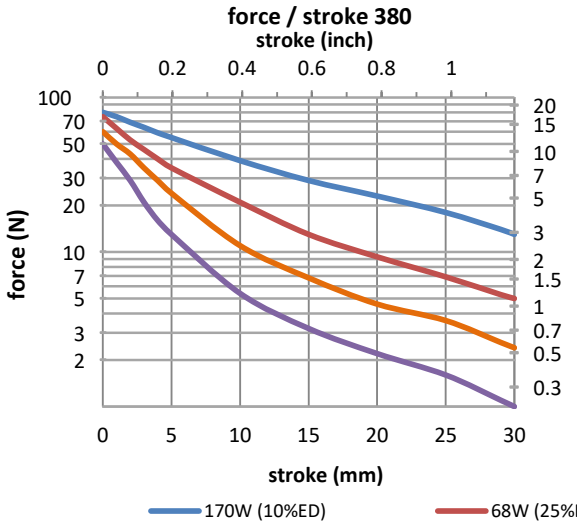
Device drawn in energised condition
Available plunger options:
pull (-Lx) / push (-Hx)
Life Expectancy (cycles):
>2M (-L, ;-H),
>5M (-LE, ;-HE),
>10M (-LL, ;HL)
Available mechanical options:
M: metric thread
F: SAE thread

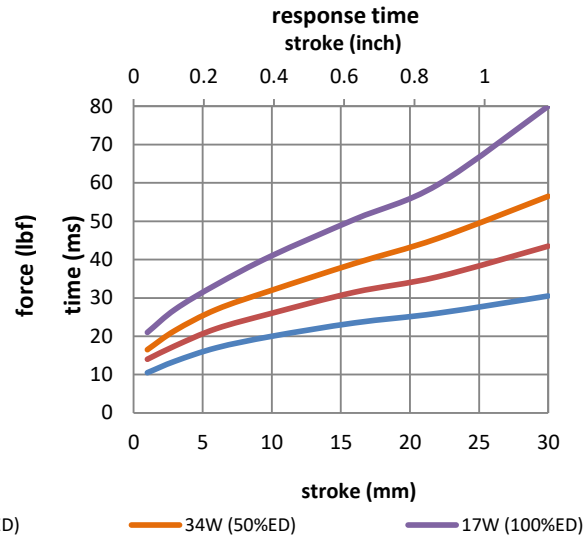
Mass 497g
Plunger 95g
Leadwires
UL1430, 20 AWG











Data at 20°C , device connected to heatsink 150x150x3mm aluminum

duty cycle = "on" time / ("on" time + "off" time) x 100%			100% cont.	50% or less	25% or less	10% or less
Max. "on" time in seconds			∞	420	100	25
watts at 20°C			17	34	68	170
ampere-turns at 20°			1800	2546	3600	5692
AWG no.	resistance Ω±10% (at 20°C)	number of turns	volts DC			
19	0.93	432	3.9	5.5	7.8	12.4
20	1.34	488	4.9	6.9	9.8	15.5
21	2.34	680	6.2	8.7	12.3	19.5
22	3.35	770	7.8	11.1	15.7	25
23	5.6	1030	9.8	13.9	19.7	31
24	9.30	1344	12.4	17.6	25	39
25	14.9	1712	15.7	22	31	50
26	24.0	2180	19.9	28	40	63
27	36.9	2680	25	35	50	79
28	58.4	3322	32	45	63	100
29	87.5	4008	39	56	79	124
30	148	5292	50	71	101	159
31	224	6360	63	90	127	200
32	344	7956	78	110	155	246
33	554	10070	100	141	199	315
34	871	12400	127	179	253	401
35	1360	15300	160	227	320	507
36	2140	19200	201	284	402	636

Insulation Resistance >100MΩ, 500VDC Megger
Dielectric Strength 1000VAC, 50/60Hz, 1 minute
Class E (120°C) insulation class