



## INTERLOCK GARTER SPRINGS 联动松紧带式弹簧

Stock sizes in stainless steel and hard-drawn steel

Garter springs are extension springs with the ends fastened together to form a ring. They are primarily used to maintain controlled pressure of a radial lip seal on a shaft and to compensate for lip wear, changes in volume or stiffness of the elastomer caused by the fluid, and the effect of temperature changes and time. Other uses include small motor belts and electrical connectors.

Henry garter springs are engineered and manufactured to provide a consistent and reliable product. They feature high initial tension to provide constant load and a special tapered end to assure a strong connection and a continuous near uniform body diameter.

### Applications

• Oil Seals • Lip Seals • Small Motor Belts • Electrical Connectors

### Lengths

Henry garter springs are available in a variety of standard lengths which can be ordered to meet your required inside diameter. The springs are already assembled, as per the illustration below.

### Finish

Plain wire.

### Material

Stainless steel: per ASTM A313 (Chemical and physical only).

Hard drawn steel: per ASTM A227 (Chemical and physical only).

Certificate of chemical analysis available at additional charge.

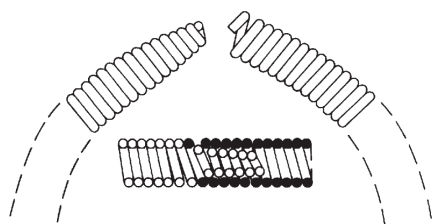
### Tolerances

Body O.D.  $\pm 0.005$  (0.13mm)

Load at extended length  $\pm 20\%$  or  $\pm 1.0$  oz (.28N), whichever is greater.

### Ends

Springs are sold assembled with interlocked ends.



### 不锈钢和硬拉钢材质的常备元件

联动松紧带式弹簧是拉伸弹簧，其末端被固定在一起以形成一个环。它们主要用于保持轴上径向唇状密封的控制压力，减小由于液体、温度变化和长时间作用而引起的弹性体刚度和体积的变化。还可用于小型的电机皮带和电气连接插头。

Henry公司生产的Henry 联动松紧带式弹簧的设计和制造保证了产品质量的稳定性和一致性。它们的特征是很高的初始张力，保持恒定的负载，并且有一个逐渐变细的末端，以保证连接的牢固性，并保证簧体直径的均匀性。

### 长度

Henry联动松紧带式弹簧有许多种标准长度，用户可以订购符合其需要的内径的部件。该弹簧已经组装好，如下图所示。

### 表面处理

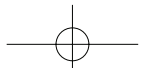
光面钢丝。

### 材质

不锈钢：符合ASTM A313（仅物理和化学特性）。

硬拉钢：符合ASTM A227（仅物理和化学特性）。

用户需要化学分析证书，需支付额外费用。



**应用场合**

• 油密封 • 唇状密封 • 小型电机皮带 • 电气连接插头

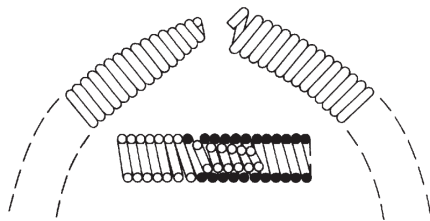
**公差**

簧体外径:  $\pm 0.005$  (0.13mm)

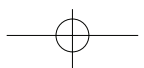
拉伸长度时的负载:  $\pm 20\%$ 或 $\pm 1.0$  oz (.28N) (以较大者为准)。

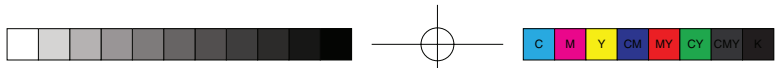
**末端**

弹簧以组装好的形式销售, 末端扣在一起。



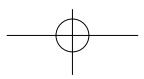
INTERLOCK GARTER SPRINGS - STAINLESS STEEL 联动松紧带式弹簧 - 不锈钢												
Catalog Number 编号	Body O.D. 簧体外径		Wire Diameter 钢丝直径		I.D. Assembled 组装后的内径		Active Body Length 有效簧体长度		Extended Length (L1) 拉伸长度 (L1)		Load at Extended Length (P1) 拉伸长度时的负载 (P1)	
	in	mm	in	mm	in	mm	in	mm	in	mm	oz	N
G040-008-0813-S	0.040	1.02	0.008	0.20	2.580	65.53	8.13	206.50	8.225	208.92	2.50	0.70
G050-009-0170-S	0.050	1.27	0.009	0.23	0.534	13.56	1.71	43.33	1.929	49.00	5.50	1.53
G050-009-0249-S	0.050	1.27	0.009	0.23	0.785	19.94	2.49	63.35	2.853	72.47	4.75	1.32
G050-010-0370-S	0.050	1.27	0.010	0.25	1.170	29.72	3.71	94.16	3.996	101.50	5.50	1.53
G050-010-0695-S	0.050	1.27	0.010	0.25	1.601	40.67	6.96	176.76	7.273	184.73	6.17	1.72
G050-011-0492-S	0.050	1.27	0.011	0.28	2.318	58.88	4.93	125.12	5.237	133.02	6.70	1.86
G062-008-0078-S	0.062	1.57	0.008	0.20	0.241	6.12	0.78	19.86	1.030	26.16	2.50	0.70
G062-010-0168-S	0.062	1.57	0.010	0.25	0.496	12.60	1.68	42.77	1.979	50.27	4.00	1.11
G062-010-0350-S	0.062	1.57	0.010	0.25	1.104	28.04	3.50	88.90	3.687	93.65	3.26	0.91
G062-010-0700-S	0.062	1.57	0.010	0.25	2.218	56.34	7.00	177.80	7.187	182.55	2.88	0.80
G062-010-1400-S	0.062	1.57	0.010	0.25	4.446	112.93	14.00	355.60	14.187	360.35	2.69	0.75
G062-011-0249-S	0.062	1.57	0.011	0.28	0.784	19.91	2.49	63.35	2.915	74.04	4.80	1.33
G062-011-0350-S	0.062	1.57	0.011	0.28	1.103	28.02	3.50	88.90	3.687	93.65	4.30	1.20
G062-011-0366-S	0.062	1.57	0.011	0.28	1.102	27.99	3.67	93.12	4.093	103.96	17.00	4.73
G062-011-0700-S	0.062	1.57	0.011	0.28	2.217	56.31	7.00	177.80	7.187	182.55	3.64	1.01
G062-011-1400-S	0.062	1.57	0.011	0.28	4.445	112.90	14.00	355.60	14.187	360.35	3.32	0.92
G062-012-0350-S	0.062	1.57	0.012	0.30	1.102	27.99	3.50	88.90	3.687	93.65	6.15	1.71
G062-012-0538-S	0.062	1.57	0.012	0.30	1.548	39.32	5.39	136.86	5.765	146.43	6.75	1.88
G062-012-0694-S	0.062	1.57	0.012	0.30	1.703	43.26	6.95	176.43	7.402	188.01	7.00	1.95
G062-012-0700-S	0.062	1.57	0.012	0.30	2.216	56.29	7.00	177.80	7.187	182.55	5.07	1.41
G062-012-1074-S	0.062	1.57	0.012	0.30	2.600	66.04	10.75	272.97	11.479	291.57	9.50	2.64
G062-012-1400-S	0.062	1.57	0.012	0.30	4.444	112.88	14.00	355.60	14.187	360.35	4.53	1.26
G062-013-0820-S	0.062	1.57	0.013	0.33	3.020	76.71	8.21	208.51	8.677	220.40	10.50	2.92
G062-013-0952-S	0.062	1.57	0.013	0.33	3.229	82.02	9.53	242.01	10.063	255.60	8.50	2.36
G062-015-1281-S	0.062	1.57	0.015	0.38	4.063	103.20	12.81	325.40	13.305	337.95	15.00	4.17
G078-010-0107-S	0.078	1.98	0.010	0.25	0.331	8.41	1.07	27.20	1.414	35.92	3.25	0.90
G078-011-0217-S	0.078	1.98	0.011	0.28	0.681	17.30	2.17	55.22	2.560	65.02	4.50	1.25
G078-012-0350-S	0.078	1.98	0.012	0.30	1.102	27.99	3.50	88.90	3.687	93.65	7.43	2.07
G078-012-0700-S	0.078	1.98	0.012	0.30	2.216	56.29	7.00	177.80	7.187	182.55	6.96	1.93
G078-012-1400-S	0.078	1.98	0.012	0.30	4.444	112.88	14.00	355.60	14.187	360.35	6.73	1.87
G078-013-0324-S	0.078	1.98	0.013	0.33	1.550	39.37	3.24	82.35	3.541	89.94	12.00	3.34
G078-014-0350-S	0.078	1.98	0.014	0.36	1.100	27.94	3.50	88.90	3.687	93.65	12.22	3.40
G078-014-0700-S	0.078	1.98	0.014	0.36	2.214	56.24	7.00	177.80	7.187	182.55	11.10	3.09
G078-014-0869-S	0.078	1.98	0.014	0.36	2.214	56.24	8.69	220.73	9.145	232.28	13.00	3.61
G078-014-1400-S	0.078	1.98	0.014	0.36	4.442	112.83	14.00	355.60	14.187	360.35	10.55	2.93
G078-015-0491-S	0.078	1.98	0.015	0.38	2.574	65.38	4.92	124.89	5.356	136.04	9.50	2.64

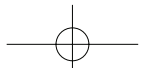




INTERLOCK GARTER SPRINGS - STAINLESS STEEL 联动松紧带式弹簧 - 不锈钢												
Catalog Number 编号	Body O.D. 簧体外径		Wire Diameter 钢丝直径		I.D. Assembled 组装后的内径		Active Body Length 有效簧体长度		Extended Length (L1) 拉伸长度 (L1)		Load at Extended Length (P1) 拉伸长度时的负载 (P1)	
	in	mm	in	mm	in	mm	in	mm	in	mm	oz	N
	G078-015-0700-S	0.078	1.98	0.015	0.38	2.752	69.90	7.00	177.88	7.458	189.43	9.50
G078-015-1390-S	0.078	1.98	0.015	0.38	4.412	112.06	13.91	353.26	14.470	367.54	12.00	3.34
G080-016-1413-S	0.080	2.03	0.016	0.41	2.995	76.07	14.14	359.08	14.684	372.97	17.12	4.76
G080-016-1663-S	0.080	2.03	0.016	0.41	3.754	95.35	16.64	422.53	17.255	438.28	16.32	4.54
G094-014-0350-S	0.094	2.39	0.014	0.36	1.100	27.94	3.50	88.90	3.687	93.65	8.14	2.26
G094-014-0700-S	0.094	2.39	0.014	0.36	2.214	56.24	7.00	177.80	7.187	182.55	7.57	2.10
G094-014-1400-S	0.094	2.39	0.014	0.36	4.442	112.83	14.00	355.60	14.187	360.35	7.29	2.03
G094-016-0350-S	0.094	2.39	0.016	0.41	1.098	27.89	3.50	88.90	3.687	93.65	10.64	2.96
G094-016-0700-S	0.094	2.39	0.016	0.41	2.212	56.18	7.00	177.80	7.187	182.55	9.43	2.62
G094-016-1400-S	0.094	2.39	0.016	0.41	4.440	112.78	14.00	355.60	14.187	360.35	8.83	2.45
G094-017-1279-S	0.094	2.39	0.017	0.43	2.906	73.81	12.80	325.02	13.418	340.82	21.00	5.84
G094-017-1443-S	0.094	2.39	0.017	0.43	4.056	103.02	14.44	366.75	15.146	384.71	13.00	3.61
G094-018-1589-S	0.094	2.39	0.018	0.46	5.120	130.05	15.90	403.76	16.556	420.52	15.50	4.31
G094-018-2065-S	0.094	2.39	0.018	0.46	6.555	166.50	20.65	524.51	21.309	541.25	19.25	5.35
G109-016-0350-S	0.109	2.77	0.016	0.41	1.098	27.89	3.50	88.90	3.687	93.65	8.77	2.44
G109-016-0700-S	0.109	2.77	0.016	0.41	2.212	56.18	7.00	177.80	7.187	182.55	8.06	2.24
G109-016-1400-S	0.109	2.77	0.016	0.41	4.440	112.78	14.00	355.60	14.187	360.35	7.71	2.14
G109-018-0350-S	0.109	2.77	0.018	0.46	1.096	27.84	3.50	88.90	3.687	93.65	11.28	3.14
G109-018-0700-S	0.109	2.77	0.018	0.46	2.210	56.13	7.00	177.80	7.187	182.55	9.91	2.75
G109-018-1400-S	0.109	2.77	0.018	0.46	4.438	112.73	14.00	355.60	14.187	360.35	9.23	2.57
G125-020-0700-S	0.125	3.18	0.020	0.51	2.204	55.98	7.00	177.80	7.187	182.55	18.17	5.05
G125-020-1400-S	0.125	3.18	0.020	0.51	4.432	112.57	14.00	355.60	14.187	360.35	16.08	4.47
G125-020-1587-S	0.125	3.18	0.020	0.51	2.928	74.37	15.87	403.12	16.619	422.12	29.44	8.18
G125-020-1959-S	0.125	3.18	0.020	0.51	5.032	127.81	19.60	497.76	20.172	512.37	15.50	4.31
G125-020-2168-S	0.125	3.18	0.020	0.51	6.218	157.94	21.68	550.55	22.246	565.05	12.25	3.41
G125-020-2600-S	0.125	3.18	0.020	0.51	8.252	209.60	26.00	660.40	26.187	665.15	15.11	4.20
G188-024-1400-S	0.188	4.76	0.024	0.61	4.432	112.57	14.00	355.60	14.187	360.35	12.09	3.36
G188-024-2600-S	0.188	4.76	0.024	0.61	8.252	209.60	26.00	660.40	26.187	665.15	11.86	3.30
G188-024-0700-S	0.188	4.76	0.024	0.61	2.204	55.98	7.00	177.80	7.187	182.55	12.58	3.50
G250-024-1400-S	0.250	6.35	0.024	0.61	4.432	112.57	14.00	355.60	14.187	360.35	11.18	3.11
G250-024-2600-S	0.250	6.35	0.024	0.61	8.252	209.60	26.00	660.40	26.187	665.15	11.09	3.08
G250-024-0700-S	0.250	6.35	0.024	0.61	2.204	55.98	7.00	177.80	7.187	182.55	11.36	3.16

INTERLOCK GARTER SPRINGS - HARD DRAWN STEEL 联动松紧带式弹簧 - 硬拉钢												
Catalog Number 编号	Body O.D. 簧体外径		Wire Diameter 钢丝直径		I.D. Assembled 组装后的内径		Active Body Length 有效簧体长度		Extended Length (L1) 拉伸长度 (L1)		Load at Extended Length (P1) 拉伸长度时的负载 (P1)	
	in	mm	in	mm	in	mm	in	mm	in	mm	oz	N
	G050-009-0157	0.050	1.27	0.009	0.23	0.491	12.47	1.571	39.90	1.866	47.40	5.00
G050-009-0259	0.050	1.27	0.009	0.23	0.816	20.73	2.592	65.84	2.881	73.18	5.25	1.46
G050-010-0369	0.050	1.27	0.010	0.25	1.163	29.54	3.698	93.93	3.958	100.53	5.50	1.53
G050-010-0506	0.050	1.27	0.010	0.25	1.601	40.67	5.063	128.60	5.375	136.53	6.17	1.72
G050-010-0731	0.050	1.27	0.010	0.25	2.318	58.88	7.314	185.78	7.687	195.25	6.70	1.86
G062-010-0248	0.062	1.57	0.010	0.25	0.782	19.86	2.488	63.20	2.655	67.44	4.00	1.11
G062-010-0350	0.062	1.57	0.010	0.25	1.104	28.04	3.500	88.90	3.687	93.65	3.26	0.91
G062-010-0700	0.062	1.57	0.010	0.25	2.218	56.34	7.000	177.80	7.187	182.55	2.88	0.80
G062-010-1400	0.062	1.57	0.010	0.25	4.446	112.93	14.000	355.60	14.187	360.35	2.69	0.75
G062-011-0159	0.062	1.57	0.011	0.28	0.496	12.60	1.593	40.46	1.906	48.41	4.00	1.11
G062-011-0350	0.062	1.57	0.011	0.28	1.103	28.02	3.500	88.90	3.687	93.65	4.30	1.20
G062-011-0489	0.062	1.57	0.011	0.28	1.548	39.32	4.898	124.41	5.316	135.03	6.75	1.88
G062-011-0700	0.062	1.57	0.011	0.28	2.217	56.31	7.000	177.80	7.187	182.55	3.64	1.01
G062-011-1400	0.062	1.57	0.011	0.28	4.445	112.90	14.000	355.60	14.187	360.35	3.32	0.92
G062-012-0350	0.062	1.57	0.012	0.30	1.102	27.99	3.500	88.90	3.687	93.65	6.15	1.71
G062-012-0700	0.062	1.57	0.012	0.30	2.216	56.29	7.000	177.80	7.187	182.55	5.07	1.41
G062-012-0796	0.062	1.57	0.012	0.30	2.524	64.11	7.968	202.39	8.281	210.34	9.87	2.74
G062-012-0950	0.062	1.57	0.012	0.30	3.014	76.56	9.506	241.45	10.063	255.60	10.50	2.92
G062-012-1018	0.062	1.57	0.012	0.30	3.229	82.02	10.182	258.62	10.534	267.56	8.50	2.36
G062-012-1400	0.062	1.57	0.012	0.30	4.444	112.88	14.000	355.60	14.187	360.35	4.53	1.26
G062-013-0700	0.062	1.57	0.013	0.33	2.218	56.34	7.009	178.03	7.405	188.09	8.50	2.36
G062-014-0350	0.062	1.57	0.014	0.36	1.102	27.99	3.506	89.05	3.836	97.43	17.00	4.73
G078-010-0214	0.078	1.98	0.010	0.25	0.672	17.07	2.143	54.43	2.756	70.00	4.50	1.25
G078-011-0349	0.078	1.98	0.011	0.28	1.101	27.97	3.493	88.72	3.927	99.75	5.50	1.53
G078-012-0350	0.078	1.98	0.012	0.30	1.102	27.99	3.500	88.90	3.687	93.65	7.43	2.07
G078-012-0498	0.078	1.98	0.012	0.30	1.575	40.01	4.986	126.64	5.397	137.08	6.75	1.88





INTERLOCK GARTER SPRINGS - HARD DRAWN STEEL 联动松紧带式弹簧 - 硬拉钢												
Catalog Number 编号	Body O.D. 簧体外径		Wire Diameter 钢丝直径		I.D. Assembled 组装后的内径		Active Body Length 有效簧体长度		Extended Length (L1) 拉伸长度 (L1)		Load at Extended Length (P1) 拉伸长度时的负载 (P1)	
	in	mm	in	mm	in	mm	in	mm	in	mm	oz	N
G078-012-0700	0.078			0.30	2.216	56.29	7.000	177.80	7.187	182.55	6.96	1.93
G078-012-1400	0.078	1.98	0.012	0.30	4.444	112.88	14.000	355.60	14.187	360.35	6.73	1.87
G078-014-0350	0.078	1.98	0.012	0.36	1.100	27.94	3.500	88.90	3.687	93.65	12.22	3.40
G078-014-0700	0.078	1.98	0.014	0.36	2.214	56.24	7.000	177.80	7.187	182.55	11.10	3.09
G078-014-0813	0.078	1.98	0.014	0.36	2.574	65.38	8.130	206.50	8.567	217.60	9.50	2.64
G078-014-1038	0.078	1.98	0.014	0.36	3.293	83.64	10.389	263.88	10.945	278.00	11.13	3.09
G078-014-1400	0.078	1.98	0.014	0.36	4.442	112.83	14.000	355.60	14.187	360.35	10.55	2.93
G078-015-0702	0.078	1.98	0.014	0.38	2.221	56.41	7.025	178.44	7.427	188.65	14.60	4.06
G078-015-1394	0.078	1.98	0.015	0.38	4.424	112.37	13.946	354.23	14.442	366.83	13.00	3.61
G080-011-0358	0.080	1.98	0.015	0.28	1.130	28.70	3.585	91.06	3.989	101.32	4.50	1.25
G080-014-0547	0.080	2.03	0.011	0.36	1.727	43.87	5.470	138.94	6.007	152.58	12.00	3.34
G080-015-0713	0.080	2.03	0.014	0.38	2.255	57.28	7.131	181.13	7.431	188.75	9.10	2.53
G080-016-0282	0.080	2.03	0.015	0.41	0.884	22.45	2.827	71.81	3.302	83.87	22.00	6.12
G080-017-0946	0.080	2.03	0.016	0.43	2.995	76.07	9.462	240.33	9.852	250.24	17.12	4.76
G080-017-1184	0.080	2.03	0.017	0.43	3.754	95.35	11.847	300.91	12.255	311.28	16.32	4.54
G080-017-1407	0.080	2.03	0.017	0.43	4.464	113.39	14.077	357.56	14.611	371.12	18.72	5.20
G094-013-0425	0.094	2.03	0.017	0.33	1.341	34.06	4.254	108.05	5.049	128.24	7.00	1.95
G094-014-0350	0.094	2.39	0.013	0.36	1.100	27.94	3.500	88.90	3.687	93.65	8.14	2.26
G094-014-0525	0.094	2.39	0.014	0.36	1.657	42.09	5.250	133.35	5.791	147.09	9.98	2.77
G094-014-0700	0.094	2.39	0.014	0.36	2.214	56.24	7.000	177.80	7.187	182.55	7.57	2.10
G094-014-1400	0.094	2.39	0.014	0.36	4.442	112.83	14.000	355.60	14.187	360.35	7.29	2.03
G094-016-0350	0.094	2.39	0.014	0.41	1.098	27.89	3.500	88.90	3.687	93.65	10.64	2.96
G094-016-0700	0.094	2.39	0.016	0.41	2.212	56.18	7.000	177.80	7.187	182.55	9.43	2.62
G094-016-1400	0.094	2.39	0.016	0.41	4.440	112.78	14.000	355.60	14.187	360.35	8.83	2.45
G094-017-1443	0.094	2.39	0.016	0.43	4.579	116.31	14.439	366.75	15.146	384.71	14.50	4.03
G094-017-1613	0.094	2.39	0.017	0.43	5.120	130.05	16.138	409.91	16.823	427.30	15.50	4.31
G094-018-0918	0.094	2.39	0.017	0.46	2.906	73.81	9.186	233.32	9.723	246.96	21.00	5.84
G094-018-1120	0.094	2.39	0.018	0.46	3.550	90.17	11.209	284.71	11.690	296.93	20.10	5.59
G094-018-2065	0.094	2.39	0.018	0.46	6.555	166.50	20.650	524.51	21.313	541.35	19.25	5.35
G094-019-2937	0.094	2.39	0.018	0.48	9.332	237.03	29.377	746.18	29.980	761.49	26.00	7.23
G109-016-0350	0.109	2.39	0.019	0.41	1.098	27.89	3.500	88.90	3.687	93.65	8.77	2.44
G109-016-0700	0.109	2.77	0.016	0.41	2.212	56.18	7.000	177.80	7.187	182.55	8.06	2.24
G109-016-1400	0.109	2.77	0.016	0.41	4.440	112.78	14.000	355.60	14.187	360.35	7.71	2.14
G109-018-0350	0.109	2.77	0.016	0.46	1.096	27.84	3.500	88.90	3.687	93.65	11.28	3.14
G109-018-0700	0.109	2.77	0.018	0.46	2.210	56.13	7.000	177.80	7.187	182.55	9.91	2.75
G109-018-1400	0.109	2.77	0.018	0.46	4.438	112.73	14.000	355.60	14.187	360.35	9.23	2.57
G125-020-0700	0.125	2.77	0.018	0.51	2.204	55.98	7.000	177.80	7.187	182.55	18.17	5.05
G125-020-1400	0.125	3.18	0.020	0.51	4.432	112.57	14.000	355.60	14.187	360.35	16.08	4.47
G125-020-2600	0.125	3.18	0.020	0.51	8.252	209.60	26.000	660.40	26.187	665.15	15.11	4.20
G125-025-0927	0.125	3.18	0.020	0.64	2.928	74.37	9.277	235.64	9.507	241.48	29.44	8.18
G188-024-0700	0.188	3.18	0.025	0.61	2.204	55.98	7.000	177.80	7.187	182.55	12.58	3.50
G188-024-1400	0.188	4.76	0.024	0.61	4.432	112.57	14.000	355.60	14.187	360.35	12.09	3.36
G188-024-2600	0.188	4.76	0.024	0.61	8.252	209.60	26.000	660.40	26.187	665.15	11.86	3.30
G250-024-0700	0.250	4.76	0.024	0.61	2.204	55.98	7.000	177.80	7.187	182.55	11.36	3.16
G250-024-1400	0.250	6.35	0.024	0.61	4.432	112.57	14.000	355.60	14.187	360.35	11.18	3.11
G250-024-2600	0.250	6.35	0.024	0.61	8.252	209.60	26.000	660.40	26.187	665.15	11.09	3.08

