

CONICAL COMPRESSION SPRINGS 圆锥形压缩弹簧

Stock sizes in stainless steel

Henry conical springs are cone shaped compression springs designed to provide a near constant spring rate and a solid height lower than a normal spring. Each spring features a variable pitch to achieve the constant spring rate and coils which nest during deflection to provide a solid height approximately equal to two wire diameters.

All springs are manufactured from stainless steel for use in a multitude of environments.

Material

Stainless Type 302 per ASTM A313 or AMS 5688 spring temper. (Chemical and physical only.)

Stainless steel springs are not recommended for applications where the temperature exceeds 500° F (260° C)

Certificate of chemical analysis available at additional charge.

Finish

Passivated steel.

Direction of Helix

Right hand.

Ends

Squared ends not ground.

Spring Rate

The spring rate is linear due to the variable pitch.

Coils

Spring are designed to permit active coils to nest within each other. This provides a solid height of approximately two wire diameters.

Solid Height

Due to coil nesting, the solid height is approximately equal to two wire diameters.



材质为不锈钢金属线的常备圆锥形压缩弹簧

Henry 圆锥形弹簧是圆锥形的压缩弹簧，用于产生接近于恒定的弹性系数，其固定状态下的高度低于一般的弹簧。每个弹簧的高度都可变，以实现恒定的弹性系数，压缩时弹簧的线圈相互套叠，弹簧的高度约等于线径的两倍。

所有弹簧都是不锈钢金属线制成的，适用于各种环境下。

材质

302不锈钢，符合ASTM A313 或者 AMS 5688，弹簧经过回火处理。（仅仅是理化处理）。

螺旋方向

右手螺旋方向

末端

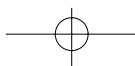
方形，不磨平。

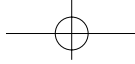
弹性系数

由于节距不等，弹率系数是线性的。

线圈

弹簧的设计使得其线圈之间可以相互套叠。这样，固定状态下的高度约为线径的两倍。





当温度超过260摄氏度（500华氏度时），不建议使用不锈钢材质的弹簧。

客户要求化学分析证书，需支付额外费用。

未道漆层
纯化钢。



侧视图

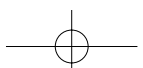


俯视图

固定状态下的高度

由于弹簧的线圈之间可以相互套叠，弹簧固定状态下的高度约为线径的两倍。

CONICAL COMPRESSION SPRINGS 圆锥形压缩弹簧														
Catalog Number 编号	Outside Diameter Large End 大端外径		Outside Diameter Small End 小端外径		Wire Diameter 线径		Free Height Approximate 自由高度（估算）		Load at 50% of Free Length 50%自由长度 时的载荷		Load at Solid Approximate 固定状态下的 载荷（估算）		Spring Rate 弹性系数	
	in	mm	in	mm	in	mm	in	mm	lb	N	lb	N	lb/in	N/mm
A0360-029-0250-S	0.360	9.14	0.125	3.18	0.029	0.74	0.250	6.35	3.45	15.35	5.29	23.53	27.58	4.83
A0420-029-0375-S	0.420	10.67	0.156	3.96	0.029	0.74	0.375	9.53	2.50	11.12	4.23	18.82	13.35	2.34
A0420-029-0312-S	0.420	10.67	0.187	4.75	0.029	0.74	0.312	7.92	2.26	10.05	3.68	16.37	14.48	2.54
A0420-029-0250-S	0.420	10.67	0.218	5.54	0.029	0.74	0.250	6.35	2.04	9.07	3.14	13.97	16.38	2.87
A0420-032-0312-S	0.420	10.67	0.156	3.96	0.032	0.81	0.312	7.92	3.63	16.15	5.77	25.66	23.25	4.07
A0420-032-0250-S	0.420	10.67	0.187	4.75	0.032	0.81	0.250	6.35	3.19	14.19	4.74	21.08	25.49	4.46
A0420-035-0250-S	0.420	10.67	0.187	4.75	0.035	0.89	0.250	6.35	5.09	22.64	7.33	32.60	40.80	7.14
A0480-029-0625-S	0.480	12.19	0.187	4.75	0.029	0.74	0.625	15.88	2.15	9.56	3.90	17.35	6.88	1.20
A0480-029-0500-S	0.480	12.19	0.218	5.54	0.029	0.74	0.500	12.70	1.93	8.58	3.40	15.12	7.70	1.35
A0480-029-0375-S	0.480	12.19	0.250	6.35	0.029	0.74	0.375	9.53	1.59	7.07	2.70	12.01	8.50	1.49
A0480-029-0312-S	0.480	12.19	0.281	7.14	0.029	0.74	0.312	7.92	1.53	6.81	2.49	11.08	9.79	1.71
A0480-032-0625-S	0.480	12.19	0.156	3.96	0.032	0.81	0.625	15.88	3.42	15.21	6.13	27.27	10.93	1.91
A0480-032-0500-S	0.480	12.19	0.187	4.75	0.032	0.81	0.500	12.70	2.88	12.81	5.02	22.33	11.51	2.02
A0480-032-0375-S	0.480	12.19	0.218	5.54	0.032	0.81	0.375	9.53	2.56	11.39	4.24	18.86	13.63	2.39
A0480-032-0312-S	0.480	12.19	0.250	6.35	0.032	0.81	0.312	7.92	2.37	10.54	3.78	16.81	15.21	2.66
A0480-035-0375-S	0.480	12.19	0.187	4.75	0.035	0.89	0.375	9.53	3.92	17.44	6.37	28.33	20.91	3.66
A0480-035-0312-S	0.480	12.19	0.218	5.54	0.035	0.89	0.312	7.92	3.48	15.48	5.39	23.97	22.26	3.90
A0480-038-0312-S	0.480	12.19	0.187	4.75	0.038	0.97	0.312	7.92	5.02	22.33	7.60	33.80	32.13	5.63
A0480-038-0250-S	0.480	12.19	0.218	5.54	0.038	0.97	0.250	6.35	4.75	21.13	6.61	29.40	38.02	6.66
A0600-026-1250-S	0.600	15.24	0.312	7.92	0.026	0.66	1.250	31.75	1.00	4.45	1.92	8.54	1.61	0.28
A0600-026-1000-S	0.600	15.24	0.343	8.71	0.026	0.66	1.000	25.40	0.84	3.74	1.58	7.03	1.67	0.29
A0600-026-0750-S	0.600	15.24	0.375	9.53	0.026	0.66	0.750	19.05	0.73	3.25	1.36	6.05	1.94	0.34
A0600-029-1250-S	0.600	15.24	0.250	6.35	0.029	0.74	1.250	31.75	1.56	6.94	2.97	13.21	2.49	0.44
A0600-029-1000-S	0.600	15.24	0.281	7.14	0.029	0.74	1.000	25.40	1.39	6.18	2.61	11.61	2.77	0.49
A0600-029-0750-S	0.600	15.24	0.343	8.71	0.029	0.74	0.750	19.05	1.18	5.25	2.19	9.74	3.16	0.55
A0600-029-0625-S	0.600	15.24	0.375	9.53	0.029	0.74	0.625	15.88	1.12	4.98	2.03	9.03	3.57	0.63
A0600-032-0750-S	0.600	15.24	0.281	7.14	0.032	0.81	0.750	19.05	1.80	8.01	3.30	14.68	4.81	0.84
A0600-032-0625-S	0.600	15.24	0.343	8.71	0.032	0.81	0.625	15.88	1.64	7.29	2.95	13.12	5.25	0.92
A0600-032-0500-S	0.600	15.24	0.375	9.53	0.032	0.81	0.500	12.70	1.53	6.81	2.67	11.88	6.13	1.07
A0600-035-0750-S	0.600	15.24	0.218	5.54	0.035	0.89	0.750	19.05	2.72	12.10	4.93	21.93	7.25	1.27
A0600-035-0625-S	0.600	15.24	0.281	7.14	0.035	0.89	0.625	15.88	2.41	10.72	4.28	19.04	7.70	1.35
A0600-035-0500-S	0.600	15.24	0.312	7.92	0.035	0.89	0.500	12.70	2.16	9.61	3.72	16.55	8.64	1.51
A0600-038-0625-S	0.600	15.24	0.250	6.35	0.038	0.97	0.625	15.88	3.57	15.88	6.27	27.89	11.42	2.00
A0600-038-0500-S	0.600	15.24	0.281	7.14	0.038	0.97	0.500	12.70	3.22	14.32	5.45	24.24	12.88	2.26
A0600-038-0375-S	0.600	15.24	0.312	7.92	0.038	0.97	0.375	9.53	2.62	11.65	4.18	18.59	13.99	2.45
A0600-040-0625-S	0.600	15.24	0.218	5.54	0.040	1.02	0.625	15.88	4.56	20.28	7.95	35.36	14.59	2.55



CONICAL COMPRESSION SPRINGS

圆锥形压缩弹簧

Catalog Number 编号	Outside Diameter Large End 大端外径		Outside Diameter Small End 小端外径		Wire Diameter 线径		Free Height Approximate 自由高度 (估算)		Load at 50% of Free Length 50%自由长度 时的载荷		Load at Solid Approximate 固定状态下的 载荷 (估算)		Spring Rate 弹性系数	
	in	mm	in	mm	in	mm	in	mm	lb	N	lb	N	lb/in	N/mm
	A0600-040-0500-S	0.600	15.24	0.250	6.35	0.040	1.02	0.500	12.70	4.07	18.10	6.83	30.38	16.28
A0600-040-0375-S	0.600	15.24	0.312	7.92	0.040	1.02	0.375	9.53	3.56	15.83	5.61	24.95	18.98	3.32
A0600-042-0500-S	0.600	15.24	0.218	5.54	0.042	1.07	0.500	12.70	5.13	22.82	8.53	37.94	20.49	3.59
A0600-042-0375-S	0.600	15.24	0.281	7.14	0.042	1.07	0.375	9.53	4.35	19.35	6.75	30.02	23.19	4.06
A0600-045-0375-S	0.600	15.24	0.250	6.35	0.045	1.14	0.375	9.53	6.09	27.09	9.25	41.14	32.49	5.69
A0720-035-1250-S	0.720	18.29	0.343	8.71	0.035	0.89	1.250	31.75	2.04	9.07	3.86	17.17	3.27	0.57
A0720-035-1000-S	0.720	18.29	0.375	9.53	0.035	0.89	1.000	25.40	1.80	8.01	3.34	14.86	3.59	0.63
A0720-035-0750-S	0.720	18.29	0.438	11.13	0.035	0.89	0.750	19.05	1.62	7.21	2.94	13.08	4.33	0.76
A0720-038-1250-S	0.720	18.29	0.281	7.14	0.038	0.97	1.250	31.75	2.99	13.30	5.61	24.95	4.78	0.84
A0720-038-1000-S	0.720	18.29	0.343	8.71	0.038	0.97	1.000	25.40	2.64	11.74	4.88	21.71	5.29	0.93
A0720-038-0750-S	0.720	18.29	0.375	9.53	0.038	0.97	0.750	19.05	2.19	9.74	3.94	17.53	5.84	1.02
A0720-038-0625-S	0.720	18.29	0.438	11.13	0.038	0.97	0.625	15.88	2.10	9.34	3.69	16.41	6.72	1.18
A0720-040-1000-S	0.720	18.29	0.281	7.14	0.040	1.02	1.000	25.40	3.31	14.72	6.08	27.04	6.61	1.16
A0720-040-0750-S	0.720	18.29	0.343	8.71	0.040	1.02	0.750	19.05	2.76	12.28	4.92	21.88	7.35	1.29
A0720-040-0625-S	0.720	18.29	0.375	9.53	0.040	1.02	0.625	15.88	2.45	10.90	4.27	18.99	7.84	1.37
A0720-040-0500-S	0.720	18.29	0.438	11.13	0.040	1.02	0.500	12.70	2.37	10.54	3.98	17.70	9.47	1.66
A0720-042-1000-S	0.720	18.29	0.281	7.14	0.042	1.07	1.000	25.40	4.19	18.64	7.67	34.12	8.37	1.47
A0720-042-0750-S	0.720	18.29	0.343	8.71	0.042	1.07	0.750	19.05	3.44	15.30	6.11	27.18	9.17	1.61
A0720-042-0625-S	0.720	18.29	0.375	9.53	0.042	1.07	0.625	15.88	3.25	14.46	5.62	25.00	10.39	1.82
A0720-045-0750-S	0.720	18.29	0.281	7.14	0.045	1.14	0.750	19.05	4.83	21.48	8.49	37.76	12.87	2.25
A0720-045-0625-S	0.720	18.29	0.343	8.71	0.045	1.14	0.625	15.88	4.35	19.35	7.44	33.09	13.91	2.44
A0720-045-0500-S	0.720	18.29	0.375	9.53	0.045	1.14	0.500	12.70	3.89	17.30	6.37	28.33	15.55	2.72
A0720-049-0625-S	0.720	18.29	0.281	7.14	0.049	1.24	0.625	15.88	6.46	28.73	10.90	48.48	20.67	3.62
A0720-049-0500-S	0.720	18.29	0.343	8.71	0.049	1.24	0.500	12.70	5.73	25.49	9.21	40.97	22.92	4.01
A0720-049-0375-S	0.720	18.29	0.375	9.53	0.049	1.24	0.375	9.53	4.84	21.53	7.15	31.80	25.82	4.52
A0720-055-0500-S	0.720	18.29	0.281	7.14	0.055	1.40	0.500	12.70	10.12	45.01	15.78	70.19	40.50	7.09
A0720-055-0375-S	0.720	18.29	0.312	7.92	0.055	1.40	0.375	9.53	8.34	37.10	11.78	52.40	44.49	7.79
A0850-042-1500-S	0.850	21.59	0.343	8.71	0.042	1.07	1.500	38.10	3.08	13.70	5.82	25.89	4.11	0.72
A0850-042-1250-S	0.850	21.59	0.375	9.53	0.042	1.07	1.250	31.75	2.70	12.01	5.04	22.42	4.32	0.76
A0850-042-1000-S	0.850	21.59	0.438	11.13	0.042	1.07	1.000	25.40	2.35	10.45	4.31	19.17	4.71	0.82
A0850-042-0750-S	0.850	21.59	0.560	14.22	0.042	1.07	0.750	19.05	2.36	10.50	4.19	18.64	6.28	1.10
A0850-045-1500-S	0.850	21.59	0.343	8.71	0.045	1.14	1.500	38.10	4.19	18.64	7.88	35.05	5.59	0.98
A0850-045-1250-S	0.850	21.59	0.375	9.53	0.045	1.14	1.250	31.75	3.75	16.68	6.96	30.96	6.00	1.05
A0850-045-1000-S	0.850	21.59	0.438	11.13	0.045	1.14	1.000	25.40	3.28	14.59	5.97	26.55	6.56	1.15
A0850-045-0750-S	0.850	21.59	0.500	12.70	0.045	1.14	0.750	19.05	3.00	13.34	5.27	23.44	7.99	1.40
A0850-049-1250-S	0.850	21.59	0.312	7.92	0.049	1.24	1.250	31.75	5.68	25.26	10.47	46.57	9.09	1.59
A0850-049-0750-S	0.850	21.59	0.438	11.13	0.049	1.24	0.750	19.05	4.26	18.95	7.40	32.92	11.35	1.99
A0850-049-0625-S	0.850	21.59	0.500	12.70	0.049	1.24	0.625	15.88	4.04	17.97	6.82	30.34	12.93	2.26
A0850-055-1000-S	0.850	21.59	0.281	7.14	0.055	1.40	1.000	25.40	8.50	37.81	15.14	67.34	17.01	2.98
A0850-055-0750-S	0.850	21.59	0.343	8.71	0.055	1.40	0.750	19.05	7.18	31.94	12.25	54.49	19.14	3.35
A0850-055-0625-S	0.850	21.59	0.438	11.13	0.055	1.40	0.625	15.88	6.58	29.27	10.84	48.22	21.05	3.69
A0850-059-0750-S	0.850	21.59	0.312	7.92	0.059	1.50	0.750	19.05	10.00	44.48	16.85	74.95	26.67	4.67
A0850-059-0625-S	0.850	21.59	0.375	9.53	0.059	1.50	0.625	15.88	8.86	39.41	14.37	63.92	28.36	4.97
A0850-063-0625-S	0.850	21.59	0.312	7.92	0.063	1.60	0.625	15.88	12.22	54.35	19.51	86.78	39.07	6.84
A0850-063-0500-S	0.850	21.59	0.375	9.53	0.063	1.60	0.500	12.70	11.09	49.33	16.60	73.84	44.33	7.76
A0850-067-0500-S	0.850	21.59	0.375	9.53	0.067	1.70	0.500	12.70	14.85	66.05	21.74	96.70	59.45	10.41
A0975-049-1500-S	0.975	24.77	0.438	11.13	0.049	1.24	1.500	38.10	3.88	17.26	7.26	32.29	5.18	0.91
A0975-049-1250-S	0.975	24.77	0.500	12.70	0.049	1.24	1.250	31.75	3.56	15.83	6.56	29.18	5.69	1.00
A0975-049-1000-S	0.975	24.77	0.560	14.22	0.049	1.24	1.000	25.40	3.29	14.63	5.93	26.38	6.58	1.15
A0975-049-0750-S	0.975	24.77	0.625	15.88	0.049	1.24	0.750	19.05	2.93	13.03	5.09	22.64	7.81	1.37
A0975-055-1500-S	0.975	24.77	0.375	9.53	0.055	1.40	1.500	38.10	6.88	30.60	12.76	56.76	9.18	1.61
A0975-055-1250-S	0.975	24.77	0.438	11.13	0.055	1.40	1.250	31.75	6.09	27.09	11.10	49.37	9.74	1.71
A0975-055-1000-S	0.975	24.77	0.500	12.70	0.055	1.40	1.000	25.40	5.40	24.02	9.61	42.75	10.79	1.89
A0975-055-0750-S	0.975	24.77	0.560	14.22	0.055	1.40	0.750	19.05	4.83	21.48	8.24	36.65	12.87	2.25
A0975-059-1250-S	0.975	24.77	0.343	8.71	0.059	1.50	1.250	31.75	8.47	37.67	15.34	68.23	13.55	2.37
A0975-059-1000-S	0.975	24.77	0.438	11.13	0.059	1.50	1.000	25.40	7.40	32.92	13.06	58.09	14.81	2.59
A0975-059-0750-S	0.975	24.77	0.500	12.70	0.059	1.50	0.750	19.05	6.44	28.65	10.85	48.26	17.18	3.01
A0975-063-1000-S	0.975	24.77	0.343	8.71	0.063	1.60	1.000	25.40	10.02	44.57	17.51	77.88	20.03	3.51
A0975-063-0750-S	0.975	24.77	0.438	11.13	0.063	1.60	0.750	19.05	8.59	38.21	14.29	63.56	22.92	4.01
A0975-067-0750-S	0.975	24.77	0.375	9.53	0.067	1.70	0.750	19.05	11.44	50.89	18.78	83.53	30.51	5.34
A0975-067-0625-S	0.975	24.77	0.438	11.13	0.067	1.70	0.625	15.88	10.27	45.68	16.14	71.79	32.85	5.75
A0975-072-0750-S	0.975	24.77	0.375	9.53	0.072	1.83	0.750	19.05	16.11	71.66	26.03	115.78	42.98	7.53
A0975-072-0625-S	0.975	24.77	0.438	11.13	0.072	1.83	0.625	15.88	14.85	66.05	22.85	101.64	47.49	8.32
A0975-074-0625-S	0.975	24.77	0.438	11.13	0.074	1.88	0.625	15.88	16.85	74.95	25.71	114.36	53.94	9.44

