

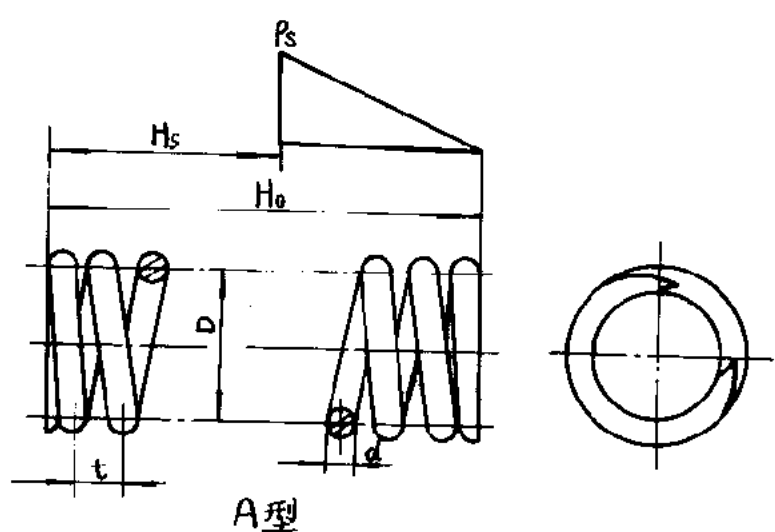
55

济南二机床	企 业 标 准	编号 Q81 — 1A
集团有限公司	普通圆柱螺旋压缩弹簧	代替 共 34 页      第 1 页

本标准适用于受变负荷作用次数在  $10^3$  次以下的以及受负变荷作用次数在  $10^3 \sim 10^6$  次或冲击负荷的冷卷与热卷截面普通圆柱螺旋压缩弹簧。

材料: 碳素弹簧钢丝 C 级 ( $d < 8\text{mm}$ )  
60Si2MnA ( $d > 8\text{mm}$ )

热处理: 回火



A型

图1 两端圈并紧磨平型

$d=3$   $D=22$   $H_0=65$  标记:  $3 \times 22 \times 65$  Q81 — 1A

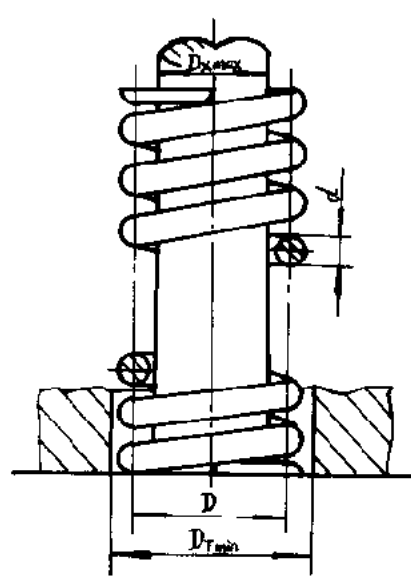


图2 芯轴或套筒的设置

会 签

制 定 依 据	拟 制	批 准	实 施 日 期			
GB/T2089 — 94	标准 化 科 处 长	李 文 军	65.5	II	III	IV
	处 长	郭 海 涛		65.5	84.7	98.5

56

普通圆柱螺旋压缩弹簧

编号 Q81 - 1A  
共 34 页 第 2 页

表 1

参 数 名 称	代 号	单 位	参 数 名 称	代 号	单 位
材 料 直 径	d	mm	有 效 圈 数	n	圈
弹 簧 中 径	D		弹 簧 刚 度	P'	N / mm
节 距	t		试 验 负 荷 下 变 形 量	F <sub>s</sub>	mm
试 验 负 荷	P <sub>s</sub>	N	最 小 允 许 工 作 负 荷 下 变 形 量	F <sub>1</sub>	
最 大 芯 轴 直 径	D <sub>Xmax</sub>	mm	最 大 允 许 工 作 负 荷 下 变 形 量	F <sub>2</sub>	
最 小 套 筒 直 径	D <sub>Tmin</sub>		展 开 长 度	L	
自 由 高 度	H <sub>0</sub>		弹 簧 单 件 重 量	m	kg

弹簧如需设置芯轴及套筒，其尺寸按图 2 及表 2 的规定。

表 2

mm

d	D	t	P <sub>s</sub> N	D <sub>Xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
0.5	3	1.19	15.2	1.9	4.1	6	4	5.71	2.66	0.53	2.13	56.6	0.0866
						7	4.5	5.08	3.00	0.60	2.40	61.3	0.0938
						8	5.5	4.16	3.66	0.73	2.93	70.7	0.108
						9	6.5	3.52	4.33	0.87	3.46	80.1	0.123
						10	7.5	3.05	4.99	1.00	3.99	89.5	0.137
						11	8.5	2.69	5.66	1.13	4.53	99.0	0.152
						*14	10.5	2.18	6.99	1.40	5.59	118	0.180
						*16	12.5	1.83	8.32	1.66	6.66	137	0.209
						*18	14.5	1.58	9.65	1.93	7.72	156	0.238
0.5	3.5	1.48	13.1	2.4	4.6	6	3.5	4.11	3.17	0.63	2.54	60.5	0.0926
						7	4	3.60	3.62	0.72	2.90	66.0	0.101
						8	4.5	3.20	4.08	0.82	3.26	71.5	0.109
						9	5.5	2.62	4.98	1.00	3.99	82.5	0.126
						11	6.5	2.21	5.89	1.18	4.71	93.5	0.143
						12	7.5	1.92	6.80	1.36	5.44	104	0.160
						*13	8.5	1.69	7.70	1.54	6.16	115	0.177
						*16	10.5	1.37	9.52	1.90	7.61	137	0.211
						*19	12.5	1.15	11.3	2.27	9.06	159	0.244
0.5	4	1.75	11.4	2.9	5.1	*22	14.5	0.99	13.1	2.63	10.5	181	0.278
						6	3	3.21	3.55	0.71	2.84	62.8	0.0963
						7	3.5	2.76	4.14	0.83	3.31	69.1	0.106
						8	4	2.41	4.73	0.95	3.79	75.4	0.116
						9	4.5	2.14	5.33	1.07	4.26	81.7	0.125
						10	5.5	1.75	6.51	1.30	5.21	94.3	0.144
						12	6.5	1.48	7.69	1.54	6.15	107	0.164
						14	7.5	1.29	8.88	1.78	7.10	119	0.183
						*18	8.5	1.13	10.1	2.01	8.05	132	0.202
						*19	10.5	0.92	12.4	2.49	9.94	157	0.241
						*22	12.5	0.77	14.8	2.96	11.8	182	0.279
						*26	14.5	0.67	17.2	3.43	13.7	207	0.318

注：(1) 表中带 \* 号者，系细长比  $b > 3.7$ ，应考虑设置芯轴或套筒。  
 (2) 无三角符号者需申请同意后采用。  
 (3) 主要尺寸精度按 GB1239.2 规定的 3 级精度制造，端部结构按 YI。其它技术要求按 GB1239.2 和 GB1239.4 的规定。

续表 2

mm

d	D	t ≈	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n ■	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>3</sup> ) kg
0.5	5	2.35	9.14	3.9	6.1	8	2.5	1.98	4.62	0.92	3.70	70.7	0.108
						9	3	1.65	5.55	1.11	4.44	78.6	0.120
						10	3.5	1.41	6.47	1.29	5.18	86.4	0.132
						11	4	1.23	7.40	1.48	5.92	94.3	0.144
						12	4.5	1.10	8.32	1.66	6.66	102	0.156
						14	5.5	0.90	10.2	2.03	8.14	118	0.180
						17	6.5	0.76	12.0	2.40	9.62	134	0.205
						*19	7.5	0.66	13.9	2.77	11.1	149	0.229
						*21	8.5	0.58	15.7	3.14	12.6	165	0.253
						*26	10.5	0.47	19.4	3.88	15.5	196	0.301
						*30	12.5	0.40	23.1	4.62	18.5	228	0.349
						*35	14.5	0.34	26.8	5.36	21.5	259	0.397
0.5	6	3.16	7.62	4.5	7.5	9	2.5	1.14	6.66	1.33	5.33	84.8	0.130
						11	3	0.95	7.99	1.60	6.39	94.3	0.144
						13	3.5	0.82	9.32	1.86	7.46	104	0.159
						14	4	0.71	10.7	2.13	8.52	113	0.173
						16	4.5	0.63	12.0	2.40	9.59	123	0.188
						19	5.5	0.52	14.6	2.93	11.7	141	0.217
						22	6.5	0.44	17.3	3.46	13.8	160	0.245
						*25	7.5	0.38	20.0	3.99	16.0	179	0.274
						*28	8.5	0.34	22.6	4.53	18.1	198	0.303
						*35	10.5	0.27	28.0	5.59	22.4	236	0.361
						*42	12.5	0.23	33.3	6.66	26.6	273	0.419
0.6	5	2.06	15.0	3.8	6.2	7	2.5	4.10	3.65	0.73	2.92	70.7	0.156
						8	3	3.41	4.37	0.87	3.50	78.6	0.173
						9	3.5	2.93	5.10	1.02	4.08	86.4	0.191
						10	4	2.56	5.83	1.17	4.67	94.3	0.208
						11	4.5	2.28	6.56	1.31	5.25	102	0.225
						13	5.5	1.86	8.02	1.60	6.42	118	0.260
						15	6.5	1.58	9.48	1.90	7.58	134	0.295
						18	7.5	1.37	10.9	2.19	8.75	149	0.329
						*20	8.5	1.20	12.4	2.48	9.92	165	0.364
						*24	10.5	0.98	15.3	3.06	12.2	196	0.433
						*28	12.5	0.82	18.2	3.65	14.6	228	0.502
						*32	14.5	0.71	21.1	4.23	16.9	259	0.572
0.6	6	2.71	12.5	4.4	7.6	8	2.5	2.37	5.25	1.05	4.20	84.8	0.187
						9	3	1.98	6.30	1.26	5.04	94.3	0.208
						11	3.5	1.69	7.35	1.47	5.88	104	0.229
						12	4	1.48	8.40	1.68	6.72	113	0.249
						14	4.5	1.32	9.45	1.89	7.56	123	0.270
						16	5.5	1.08	11.5	2.31	9.24	141	0.312
						20	6.5	0.91	13.6	2.73	10.9	160	0.353
						22	7.5	0.79	15.7	3.15	12.6	179	0.395
						*26	8.5	0.70	17.8	3.57	14.3	198	0.437
						*30	10.5	0.56	22.0	4.41	17.6	236	0.520
						*35	12.5	0.47	26.2	5.25	21.0	273	0.603
						*42	14.5	0.41	30.4	6.09	24.4	311	0.686
0.6	8	4.35	9.35	6.4	9.6	13	2.5	1.00	9.33	1.87	7.47	113	0.249
						15	3	0.83	11.2	2.24	8.96	126	0.277
						17	3.5	0.71	13.1	2.61	10.5	138	0.305
						19	4	0.62	14.9	2.99	11.9	151	0.333
						22	4.5	0.56	16.8	3.36	13.4	163	0.360

续表 2

mm

d	D	t ≈	P <sub>s</sub> N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
0.6	8	4.35	9.35	6.4	9.6	26	5.5	0.45	20.5	4.11	16.4	189	0.416
						*30	6.5	0.38	24.3	4.85	19.4	214	0.471
						*35	7.5	0.33	28.0	5.60	22.4	239	0.527
						*40	8.5	0.29	31.7	6.35	25.4	264	0.582
						*48	10.5	0.24	39.2	7.84	31.4	314	0.693
						*58	12.5	0.20	46.7	9.33	37.3	364	0.804
						6	2.5	17.8	2.15	0.43	1.72	63.6	0.249
0.8	4.5	1.66	38.3	3.1	5.9	7	3	14.8	2.58	0.52	2.07	70.7	0.277
						8	3.5	12.7	3.01	0.60	2.41	77.8	0.305
						9	4	11.1	3.44	0.69	2.75	84.8	0.333
						10	4.5	9.86	3.87	0.77	3.10	91.9	0.360
						11	5.5	8.07	4.73	0.95	3.79	106	0.416
						13	6.5	6.83	5.59	1.12	4.48	120	0.471
						15	7.5	5.92	6.46	1.29	5.16	134	0.527
						16	8.5	5.22	7.32	1.46	5.85	148	0.582
						*20	10.5	4.23	9.04	1.81	7.23	177	0.693
						*24	12.5	3.55	10.8	2.15	8.61	205	0.804
						*26	14.5	3.06	12.5	2.50	9.98	233	0.915
0.8	5	1.87	34.5	3.6	6.4	7	2.5	12.9	2.66	0.53	2.13	70.7	0.277
						8	3	10.8	3.19	0.64	2.55	78.6	0.308
						9	3.5	9.25	3.72	0.74	2.98	86.4	0.339
						10	4	8.09	4.25	0.85	3.40	94.3	0.370
						11	4.5	7.19	4.78	0.96	3.83	102	0.400
						12	5.5	5.88	5.84	1.17	4.68	118	0.462
						14	6.5	4.98	6.91	1.38	5.53	134	0.524
						16	7.5	4.31	7.97	1.59	6.38	149	0.585
						18	8.5	3.81	9.03	1.81	7.23	165	0.647
						*22	10.5	3.08	11.2	2.23	8.93	196	0.770
						*24	12.5	2.59	13.3	2.66	10.6	228	0.893
0.8	6	2.34	28.7	4.2	7.8	*30	14.5	2.23	15.4	3.08	12.3	259	1.02
						8	2.5	7.49	3.83	0.77	3.06	84.8	0.333
						9	3	6.24	4.59	0.92	3.67	94.3	0.370
						10	3.5	5.35	5.36	1.07	4.28	104	0.407
						11	4	4.68	6.12	1.22	4.90	113	0.444
						13	4.5	4.16	6.89	1.38	5.51	123	0.480
						15	5.5	3.40	8.42	1.68	6.73	141	0.554
						17	6.5	2.88	9.95	1.99	7.96	160	0.628
						20	7.5	2.50	11.5	2.30	9.18	179	0.702
						22	8.5	2.20	13.0	2.60	10.4	198	0.776
						*28	10.5	1.78	16.1	3.21	12.9	236	0.924
0.8	7	2.89	24.6	5.2	8.8	*32	12.5	1.50	19.1	3.83	15.3	273	1.07
						*38	14.5	1.29	22.2	4.44	17.8	311	1.22
						9	2.5	4.72	5.21	1.04	4.17	99.0	0.388
						11	3	3.93	6.25	1.25	5.00	110	0.431
						12	3.5	3.37	7.29	1.46	5.83	121	0.474
						14	4	2.95	8.33	1.67	6.67	132	0.517
						15	4.5	2.62	9.37	1.87	7.50	143	0.561
						18	5.5	2.14	11.5	2.29	9.16	165	0.647
						22	6.5	1.81	13.5	2.71	10.8	187	0.733
						24	7.5	1.57	15.6	3.12	12.5	209	0.819
						*28	8.5	1.39	17.7	3.54	14.2	231	0.906
						*32	10.5	1.12	21.9	4.37	17.5	275	1.08

普通圆柱螺旋压缩弹簧

编号 Q81 1A

共 34 页

第 5 页

续表 2

mm

d	D	t ≈	P <sub>s</sub> N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>3</sup> ) kg
0.8	8	3.53	21.6	6.2	9.8	*38	12.5	0.94	26.0	5.21	20.8	319	1.25
						*45	14.5	0.81	30.2	6.04	24.2	363	1.42
						11	2.5	3.16	6.80	1.36	5.44	113	0.444
						13	3	2.63	8.16	1.63	6.53	126	0.493
						14	3.5	2.26	9.52	1.90	7.62	138	0.542
						16	4	1.98	10.9	2.18	8.71	151	0.591
						18	4.5	1.76	12.2	2.45	9.79	163	0.641
						22	5.5	1.44	15.0	2.99	12.0	189	0.739
						26	6.5	1.22	17.7	3.54	14.1	214	0.838
						*30	7.5	1.05	20.4	4.08	16.3	239	0.936
						*32	8.5	0.93	23.1	4.62	18.5	264	1.03
						*40	10.5	0.75	28.6	5.71	22.9	314	1.23
						*48	12.5	0.63	34.0	6.80	27.2	364	1.43
						*55	14.5	0.54	39.4	7.89	31.6	415	1.63
						15	2.5	1.62	10.6	2.13	8.50	141	0.554
0.8	10	5.07	17.2	8.2	11.8	17	3	1.35	12.8	2.55	10.2	157	0.616
						20	3.5	1.16	14.9	2.98	11.9	173	0.678
						22	4	1.01	17.0	3.40	13.6	189	0.739
						26	4.5	0.90	19.1	3.83	15.3	204	0.801
						30	5.5	0.74	23.4	4.68	18.7	236	0.924
						35	6.5	0.62	27.6	5.53	22.1	267	1.05
						*40	7.5	0.54	31.9	6.38	25.5	298	1.17
						*45	8.5	0.48	36.1	7.23	28.9	330	1.29
						*55	10.5	0.39	44.6	8.93	35.7	393	1.54
						*65	12.5	0.32	53.1	10.6	42.5	456	1.79
1	5	1.83	65.4	3.4	6.6	7	2.5	31.6	2.06	0.41	1.65	70.7	0.433
						8	3	26.3	2.48	0.50	1.98	78.6	0.481
						9	3.5	22.6	2.89	0.58	2.31	86.4	0.529
						10	4	19.8	3.30	0.66	2.64	94.3	0.578
						11	4.5	17.6	3.71	0.74	2.97	102	0.626
						12	5.5	14.4	4.54	0.91	3.63	118	0.722
						14	6.5	12.2	5.36	1.07	4.29	134	0.818
						16	7.5	10.5	6.19	1.24	4.95	149	0.914
						18	8.5	9.29	7.01	1.40	5.61	165	1.01
						*22	10.5	7.52	8.67	1.73	6.93	196	1.20
						*26	12.5	6.32	10.3	2.06	8.25	228	1.40
						*30	14.5	5.45	12.0	2.39	9.57	259	1.59
						8	2.5	18.3	2.97	0.59	2.38	84.8	0.520
						9	3	15.2	3.57	0.71	2.85	94.3	0.578
						10	3.5	13.1	4.16	0.83	3.33	104	0.635
1	6	2.20	54.5	4.0	8.0	11	4	11.4	4.75	0.95	3.80	113	0.693
						12	4.5	10.2	5.35	1.07	4.28	123	0.751
						15	5.5	8.31	6.54	1.31	5.23	141	0.866
						17	6.5	7.03	7.72	1.54	6.18	160	0.982
						19	7.5	6.10	8.91	1.78	7.13	179	1.10
						20	8.5	5.38	10.1	2.02	8.08	198	1.21
						*26	10.5	4.35	12.5	2.50	9.98	236	1.44
						*30	12.5	3.66	14.9	2.97	11.9	273	1.67
						*35	14.5	3.15	17.2	3.45	13.8	311	1.91
						9	2.5	11.5	4.04	0.81	3.24	99.0	0.606
						10	3	9.60	4.85	0.97	3.88	110	0.674
						12	3.5	8.23	5.66	1.13	4.53	121	0.741

续表 2

mm

d	D	t s	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>3</sup> ) kg
1	7	2.62	46.7	5.0	9.0	13	4	7.20	6.47	1.29	5.18	132	0.809
						14	4.5	6.40	7.28	1.46	5.82	143	0.876
						17	5.5	5.23	8.90	1.78	7.12	165	1.01
						20	6.5	4.43	10.5	2.10	8.41	187	1.15
						22	7.5	3.84	12.1	2.43	9.71	209	1.28
						*26	8.5	3.39	13.7	2.75	11.0	231	1.41
						*30	10.5	2.74	17.0	3.40	13.6	275	1.68
						*35	12.5	2.30	20.2	4.04	16.2	319	1.95
						*40	14.5	1.99	23.5	4.69	18.8	363	2.22
1	8	3.12	40.9	6.0	10.0	10	2.5	7.71	5.28	1.06	4.23	113	0.693
						12	3	6.43	6.34	1.27	5.07	126	0.770
						13	3.5	5.51	7.39	1.48	5.92	138	0.847
						15	4	4.82	8.45	1.69	6.76	151	0.924
						17	4.5	4.29	9.51	1.90	7.61	163	1.00
						20	5.5	3.51	11.6	2.32	9.30	189	1.16
						24	6.5	2.97	13.7	2.75	11.0	214	1.31
						26	7.5	2.57	15.8	3.17	12.7	239	1.46
						*30	8.5	2.27	18.0	3.59	14.4	264	1.62
						*35	10.5	1.84	22.2	4.44	17.7	314	1.93
						*42	12.5	1.54	26.4	5.28	21.1	364	2.23
						*48	14.5	1.33	30.6	6.13	24.5	415	2.54
1	9	3.68	36.4	7.0	11.0	12	2.5	5.42	6.68	1.34	5.35	127	0.780
						14	3	4.52	8.02	1.60	6.42	141	0.866
						15	3.5	3.87	9.36	1.87	7.49	156	0.953
						17	4	3.39	10.7	2.14	8.56	170	1.04
						20	4.5	3.01	12.0	2.41	9.63	184	1.13
						24	5.5	2.46	14.7	2.94	11.8	212	1.30
						26	6.5	2.08	17.4	3.48	13.9	240	1.47
						30	7.5	1.81	20.1	4.01	16.0	269	1.65
						*35	8.5	1.59	22.7	4.55	18.2	297	1.82
						*42	10.5	1.29	28.1	5.62	22.5	353	2.17
						*48	12.5	1.08	33.4	6.68	26.7	410	2.51
						*58	14.5	0.93	38.8	7.75	31.0	467	2.86
1	10	4.31	32.7	8.0	12.0	13	2.5	3.95	8.25	1.65	6.60	141	0.866
						15	3	3.29	9.90	1.98	7.92	157	0.963
						18	3.5	2.82	11.6	2.31	9.24	173	1.06
						20	4	2.47	13.2	2.64	10.6	189	1.16
						22	4.5	2.19	14.9	2.97	11.9	204	1.25
						26	5.5	1.80	18.2	3.63	14.5	236	1.44
						30	6.5	1.52	21.5	4.29	17.2	267	1.64
						35	7.5	1.32	24.8	4.95	19.8	298	1.83
						*40	8.5	1.16	28.1	5.61	22.4	330	2.02
						*48	10.5	0.94	34.7	6.93	27.7	393	2.41
						*58	12.5	0.79	41.3	8.25	33.0	456	2.79
						*65	14.5	0.68	47.9	9.57	38.3	518	3.18
	12	6.78	27.3	9.0	15.0	17	2.5	2.29	11.9	2.38	9.51	170	1.04
						20	3	1.90	14.3	2.85	11.4	189	1.16
						24	3.5	1.63	16.6	3.33	13.3	207	1.27
						26	4	1.43	19.0	3.80	15.2	226	1.39
						28	4.5	1.27	21.4	4.28	17.1	245	1.50
						35	5.5	1.04	26.1	5.23	20.9	283	1.73
						40	6.5	0.88	30.9	6.18	24.7	320	1.96

续表 2

mm

d	D	t	Ps	D <sub>ymax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n	P'	Fs	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> )
			N				圈	N/mm					kg
1	12	6.78	27.3	9.0	15.0	*48	7.5	0.76	35.7	7.13	28.5	358	2.19
						*52	8.5	0.67	40.4	8.08	32.3	396	2.43
						*65	10.5	0.54	49.9	9.98	39.9	471	2.89
						*75	12.5	0.46	59.4	11.9	47.5	547	3.35
						*90	14.5	0.39	68.9	13.8	55.1	622	3.81
1	14	7.49	23.4	11.0	17.0	22	2.5	1.44	16.2	3.24	12.9	198	1.21
						26	3	1.20	19.4	3.88	15.5	220	1.35
						30	3.5	1.03	22.6	4.53	18.1	242	1.48
						32	4	0.90	25.9	5.18	20.7	264	1.62
						38	4.5	0.80	29.1	5.82	23.3	286	1.75
						45	5.5	0.65	35.6	7.12	28.5	330	2.02
						*52	6.5	0.55	42.1	8.41	33.6	374	2.29
						*60	7.5	0.48	48.5	9.71	38.8	418	2.56
						*70	8.5	0.42	55.0	11.0	44.0	462	2.83
						*80	10.5	0.34	67.9	13.6	54.3	550	3.37
						*100	12.5	0.29	80.9	16.2	64.7	638	3.91
1.2	6	2.16	91.5	3.8	8.2	8	2.5	37.9	2.42	0.48	1.93	84.8	0.748
						9	3	31.6	2.90	0.58	2.32	94.3	0.832
						10	3.5	27.1	3.38	0.68	2.71	104	0.915
						11	4	23.7	3.87	0.77	3.09	113	0.998
						12	4.5	21.1	4.35	0.87	3.48	123	1.08
						14	5.5	17.2	5.32	1.06	4.25	141	1.25
						16	6.5	14.6	6.28	1.26	5.03	160	1.41
						19	7.5	12.6	7.25	1.45	5.80	179	1.58
						22	8.5	11.2	8.21	1.64	6.57	198	1.75
						*25	10.5	9.03	10.1	2.03	8.12	236	2.08
						*30	12.5	7.58	12.1	2.42	9.66	273	2.41
1.2	7	2.51	78.4	4.8	9.2	*35	14.5	6.54	14.0	2.80	11.2	311	2.74
						9	2.5	23.9	3.29	0.66	2.63	99.0	0.873
						10	3	19.9	3.95	0.79	3.16	110	0.970
						11	3.5	17.1	4.60	0.92	3.68	121	1.07
						13	4	14.9	5.26	1.05	4.21	132	1.16
						14	4.5	13.3	5.92	1.18	4.74	143	1.26
						16	5.5	10.9	7.24	1.45	5.79	165	1.46
						19	6.5	9.18	8.55	1.71	6.84	187	1.65
						22	7.5	7.96	9.87	1.97	7.89	209	1.84
						25	8.5	7.02	11.2	2.24	8.95	231	2.04
						*30	10.5	5.69	13.8	2.76	11.0	275	2.43
1.2	8	2.92	68.6	5.8	10.2	*35	12.5	4.78	16.4	3.29	13.2	319	2.81
						*40	14.5	4.12	19.1	3.81	15.3	363	3.20
						10	2.5	16.0	4.30	0.86	3.44	113	0.998
						11	3	13.3	5.15	1.03	4.12	126	1.11
						13	3.5	11.4	6.01	1.20	4.81	138	1.22
						15	4	10.0	6.87	1.37	5.50	151	1.33
						16	4.5	8.89	7.73	1.55	6.19	163	1.44
						19	5.5	7.27	9.45	1.89	7.56	189	1.66
						22	6.5	6.15	11.2	2.23	8.93	214	1.89
						26	7.5	5.33	12.9	2.58	10.3	239	2.11
						28	8.5	4.71	14.6	2.92	11.7	264	2.33
1.2	8	2.92	68.6	5.8	10.2	*35	10.5	3.81	18.0	3.61	14.4	314	2.77
						*40	12.5	3.20	21.5	4.30	17.2	364	3.22
						*45	14.5	2.76	24.9	4.98	19.9	415	3.66

续表 2

mm

d	D	t	Ps	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n	P'	Fs	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> )
		s	N				圈	N/mm					kg
1.2	10	4.42	54.9	7.8	12.2	14	2.5	8.19	6.71	1.34	5.37	141	1.25
						16	3	6.83	8.05	1.61	6.44	157	1.39
						18	3.5	5.85	9.40	1.88	7.52	173	1.52
						22	4	5.12	10.7	2.15	8.59	189	1.66
						24	4.5	4.55	12.1	2.42	9.66	204	1.80
						28	5.5	3.72	14.8	2.95	11.8	236	2.08
						32	6.5	3.15	17.5	3.49	14.0	267	2.36
						*38	7.5	2.73	20.1	4.03	16.1	298	2.63
						*40	8.5	2.41	22.8	4.56	18.3	330	2.91
						*50	10.5	1.95	28.2	5.64	22.6	393	3.47
						*58	12.5	1.64	33.6	6.71	26.8	456	4.02
						*65	14.5	1.41	38.9	7.79	31.1	518	4.57
1.2	12	5.06	45.7	8.8	15.2	16	2.5	4.74	9.66	1.93	7.73	170	1.50
						18	3	3.95	11.6	2.32	9.28	189	1.66
						22	3.5	3.39	13.5	2.71	10.8	207	1.83
						24	4	2.96	15.5	3.09	12.4	226	2.00
						26	4.5	2.63	17.4	3.48	13.9	245	2.16
						32	5.5	2.15	21.3	4.25	17.0	283	2.49
						38	6.5	1.82	25.1	5.03	20.1	320	2.83
						42	7.5	1.58	29.0	5.80	23.2	358	3.16
						*48	8.5	1.39	32.9	6.57	26.3	396	3.49
						*58	10.5	1.13	40.6	8.12	32.5	471	4.16
						*70	12.5	0.95	48.3	9.66	38.7	547	4.82
						*80	14.5	0.82	56.1	11.2	44.8	622	5.49
1.2	14	6.46	39.2	10.8	17.2	19	2.5	2.98	13.2	2.63	10.5	198	1.75
						22	3	2.49	15.8	3.16	12.6	220	1.94
						26	3.5	2.13	18.4	3.68	14.7	242	2.13
						30	4	1.87	21.0	4.21	16.8	264	2.33
						32	4.5	1.66	23.7	4.74	18.9	286	2.52
						38	5.5	1.36	28.9	5.79	23.2	330	2.91
						45	6.5	1.15	34.2	6.84	27.4	374	3.30
						*52	7.5	0.99	39.5	7.89	31.6	418	3.69
						*58	8.5	0.88	44.7	8.95	35.8	462	4.07
						*70	10.5	0.71	55.2	11.0	44.2	550	4.85
						*85	12.5	0.60	65.8	13.2	52.6	638	5.63
						*100	14.5	0.51	76.3	15.3	61.0	726	6.40
1.6	8	2.85	15.8	5.4	10.6	11	2.5	50.6	3.12	0.62	2.50	113	1.77
						12	3	42.1	3.75	0.75	3.00	126	1.97
						14	3.5	36.1	4.37	0.87	3.50	138	2.17
						15	4	31.6	5.00	1.00	4.00	151	2.37
						16	4.5	28.1	5.62	1.12	4.50	163	2.56
						18	5.5	23.0	6.87	1.37	5.49	189	2.96
						22	6.5	19.4	8.12	1.62	6.49	214	3.35
						26	7.5	16.9	9.37	1.87	7.49	239	3.75
						28	8.5	14.9	10.6	2.12	8.49	264	4.14
						*35	10.5	12.0	13.1	2.62	10.5	314	4.93
						*40	12.5	10.1	15.6	3.12	12.5	364	5.72
						*45	14.5	8.72	18.1	3.62	14.5	415	6.51
1.6	10	3.55	126	7.4	12.6	13	2.5	25.9	4.88	0.98	3.90	141	2.22
						14	3	21.6	5.85	1.17	4.68	157	2.46
						16	3.5	18.5	6.83	1.37	5.46	173	2.71
						18	4	16.2	7.81	1.56	6.24	189	2.96



63

## 普通圆柱螺旋压缩弹簧

编号 Q81 - 1A

共 34 页

第 9 页

续表 2

mm

d	D	t	P <sub>s</sub> N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
1.6	10	3.55	126	7.4	12.6	20	4.5	14.4	8.78	1.76	7.02	204	3.20
						24	5.5	11.8	10.7	2.15	8.59	236	3.70
						28	6.5	9.96	12.7	2.54	10.1	267	4.19
						30	7.5	8.63	14.6	2.93	11.7	298	4.68
						35	8.5	7.61	16.6	3.32	13.3	330	5.17
						*42	10.5	6.16	20.5	4.10	16.4	393	6.16
						*48	12.5	5.18	24.4	4.88	19.5	456	7.15
1.6	12	4.41	105	8.4	15.6	*55	14.5	4.46	28.3	5.66	22.6	518	8.13
						15	2.5	15.0	7.02	1.40	5.62	170	2.66
						17	3	12.5	8.43	1.69	6.74	189	2.96
						19	3.5	10.7	9.83	1.97	7.87	207	3.25
						22	4	9.36	11.2	2.25	8.99	226	3.55
						24	4.5	8.32	12.6	2.53	10.1	245	3.84
						28	5.5	6.81	15.5	3.09	12.4	283	4.44
						32	6.5	5.76	18.3	3.65	14.6	320	5.03
						38	7.5	4.99	21.1	4.21	16.9	358	5.62
						42	8.5	4.41	23.9	4.78	19.1	396	6.21
						*50	10.5	3.57	29.5	5.90	23.6	471	7.39
						*60	12.5	3.00	35.1	7.02	28.1	547	8.58
1.6	14	5.42	90.1	10.4	17.6	*70	14.5	2.58	40.7	8.15	32.6	622	9.76
						17	2.5	9.43	9.56	1.91	7.65	198	3.10
						20	3	7.86	11.5	2.29	9.18	220	3.45
						24	3.5	6.74	13.4	2.68	10.7	242	3.79
						26	4	5.90	15.3	3.06	12.2	264	4.14
						28	4.5	5.24	17.2	3.44	13.8	286	4.48
						35	5.5	4.29	21.0	4.21	16.8	330	5.17
						40	6.5	3.63	24.9	4.97	19.9	371	5.86
						45	7.5	3.14	28.7	5.74	22.9	418	6.55
						50	8.5	2.77	32.5	6.50	26.0	462	7.24
						*60	10.5	2.25	40.2	8.03	32.1	550	8.62
1.6	16	6.59	78.8	12.4	19.6	*70	12.5	1.89	47.8	9.56	38.2	638	10.0
						*80	14.5	1.63	55.5	11.1	44.4	726	11.4
						20	2.5	6.32	12.5	2.50	9.99	226	3.55
						24	3	5.27	15.0	3.00	12.0	251	3.94
						28	3.5	4.51	17.5	3.50	14.0	276	4.34
						30	4	3.95	20.0	4.00	16.0	302	4.73
						35	4.5	3.51	22.5	4.50	18.0	327	5.13
						40	5.5	2.87	27.5	5.49	22.0	377	5.91
						48	6.5	2.43	32.5	6.49	26.0	427	6.70
						55	7.5	2.11	37.5	7.49	30.0	478	7.49
						*60	8.5	1.86	42.5	8.49	34.0	528	8.28
						*70	10.5	1.50	52.5	10.5	42.0	628	9.86
1.6	18	7.92	70.1	14.4	21.6	*85	12.5	1.26	62.4	12.5	50.0	729	11.4
						*100	14.5	1.09	72.4	14.5	57.9	829	13.0
						24	2.5	4.44	15.8	3.16	12.6	255	3.99
						28	3	3.70	19.0	3.79	15.2	283	4.44
						32	3.5	3.17	22.1	4.43	17.7	311	4.88
						35	4	2.77	25.3	5.06	20.2	339	5.32
						40	4.5	2.47	28.5	5.69	22.8	368	5.77
						48	5.5	2.02	34.8	6.95	27.8	424	6.65
						55	6.5	1.71	41.1	8.22	32.9	481	7.54
						65	7.5	1.48	47.4	9.48	37.9	537	8.43

64

## 普通圆柱螺旋压缩弹簧

编号 Q81 — 1A

共 34 页

第 10 页

续表 2

mm

d	D	t mm	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>3</sup> ) kg
1.6	10	7.92	70.1	14.4	21.6	*70	8.5	1.31	53.7	10.7	43.0	594	9.31
						*90	10.5	1.06	66.4	13.3	53.1	707	11.1
						*105	12.5	0.89	79.0	15.8	63.2	820	12.9
						*120	14.5	0.77	91.7	18.3	73.3	933	14.6
1.6	20	9.40	63.1	15.4	23.6	28	2.5	3.24	19.5	3.90	15.6	283	4.44
						32	3	2.70	23.4	4.68	18.7	314	4.93
						38	3.5	2.31	27.3	5.46	21.9	346	5.42
						42	4	2.02	31.2	6.24	25.0	377	5.91
						48	4.5	1.80	35.1	7.02	28.1	408	6.41
						55	5.5	1.47	42.9	8.59	34.3	471	7.39
						65	6.5	1.24	50.7	10.1	40.6	534	8.38
						*75	7.5	1.08	58.5	11.7	46.8	597	9.36
						*85	8.5	0.95	66.3	13.3	53.1	660	10.3
						*105	10.5	0.77	82.0	16.4	65.6	786	12.3
						*120	12.5	0.65	97.6	19.5	78.1	911	14.3
						*140	14.5	0.56	113	22.6	90.5	1037	16.3
1.6	22	11.0	57.3	17.4	26.6	32	2.5	2.43	23.6	4.72	18.9	311	4.88
						38	3	2.03	28.3	5.67	22.7	346	5.42
						42	3.5	1.74	33.1	6.61	26.4	380	5.96
						48	4	1.52	37.8	7.56	30.2	415	6.51
						55	4.5	1.35	42.5	8.50	34.0	449	7.05
						65	5.5	1.11	51.9	10.4	41.6	518	8.13
						75	6.5	0.94	61.4	12.3	49.1	588	9.22
						*85	7.5	0.81	70.8	14.2	56.7	657	10.3
						*105	8.5	0.72	80.3	16.1	64.2	726	11.4
						*120	10.5	0.58	99.2	19.8	79.3	864	13.6
2	10	3.46	231	7.0	13.0	13	2.5	63.2	3.65	0.73	2.92	141	3.47
						15	3	52.7	4.38	0.88	3.51	157	3.85
						17	3.5	45.1	5.12	1.02	4.09	173	4.24
						18	4	39.5	5.85	1.17	4.68	189	4.62
						20	4.5	35.1	6.58	1.32	5.26	204	5.01
						24	5.5	28.7	8.04	1.61	6.43	236	5.78
						28	6.5	24.3	9.50	1.90	7.60	267	6.55
						30	7.5	21.1	11.0	2.19	8.77	298	7.32
						35	8.5	18.6	12.4	2.48	9.94	330	8.09
						*40	10.5	15.0	15.3	3.07	12.3	393	9.63
						*48	12.5	12.6	18.3	3.65	14.6	456	11.2
						*55	14.5	10.9	21.2	4.24	17.0	518	12.7
2	12	4.11	192	8.0	16.0	15	2.5	36.6	5.26	1.05	4.21	170	4.16
						17	3	30.5	6.31	1.26	5.05	189	4.62
						19	3.5	26.1	7.37	1.47	5.89	207	5.08
						22	4	22.9	8.42	1.68	6.74	226	5.54
						24	4.5	20.3	9.47	1.89	7.58	245	6.01
						28	5.5	16.6	11.6	2.32	9.26	283	6.93
						32	6.5	14.1	13.7	2.74	10.9	320	7.85
						35	7.5	12.2	15.8	3.16	12.6	358	8.78
						40	8.5	10.8	17.9	3.58	14.3	396	9.70
						*48	10.5	8.71	22.1	4.42	17.7	471	11.6
						*58	12.5	7.31	26.3	5.26	21.0	547	13.4
						*65	14.5	6.31	30.5	6.10	24.4	622	15.2

续表 2

mm

d	D	t ≈	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>3</sup> ) kg
2	14	4.87	165	10.0	18.0	17	2.5	23.0	7.16	1.43	5.73	198	4.85
						19	3	19.2	8.59	1.72	6.88	220	5.39
						22	3.5	16.5	10.0	2.01	8.02	242	5.93
						24	4	14.4	11.5	2.29	9.17	264	6.47
						26	4.5	12.8	12.9	2.58	10.3	286	7.01
						32	5.5	10.5	15.8	3.15	12.6	330	8.09
						38	6.5	8.86	18.6	3.72	14.9	374	9.16
						42	7.5	7.68	21.5	4.30	17.2	418	10.2
						50	8.5	6.77	24.4	4.87	19.5	462	11.3
						*55	10.5	5.48	30.1	6.02	24.1	550	13.5
						*65	12.5	4.61	35.8	7.16	28.6	638	15.6
						*75	14.5	3.97	41.5	8.31	33.2	726	17.8
2	16	5.74	144	12.0	20.0	19	2.5	15.4	9.35	1.87	7.48	226	5.54
						22	3	12.9	11.2	2.25	8.98	251	6.16
						24	3.5	11.0	13.1	2.62	10.5	276	6.78
						28	4	9.64	15.0	2.99	12.0	302	7.39
						30	4.5	8.57	16.8	3.37	13.5	327	8.01
						38	5.5	7.01	20.6	4.12	16.5	377	9.24
						42	6.5	5.93	24.3	4.86	19.5	427	10.5
						48	7.5	5.14	28.1	5.61	22.5	478	11.7
						55	8.5	4.54	31.8	6.36	25.4	528	12.9
						*65	10.5	3.67	39.3	7.86	31.4	628	15.4
						*75	12.5	3.09	46.8	9.35	37.4	729	17.9
						*90	14.5	2.66	54.3	10.9	43.4	829	20.3
2	18	6.74	128	14.0	22.0	22	2.5	10.8	11.8	2.37	9.47	255	6.24
						26	3	9.03	14.2	2.84	11.4	283	6.93
						28	3.5	7.74	16.6	3.31	13.3	311	7.62
						32	4	6.77	18.9	3.79	15.2	339	8.32
						35	4.5	6.02	21.3	4.26	17.0	368	9.01
						42	5.5	4.93	26.0	5.21	20.8	424	10.4
						48	6.5	4.17	30.8	6.16	24.6	481	11.8
						55	7.5	3.61	35.5	7.10	28.4	537	13.2
						65	8.5	3.19	40.3	8.05	32.2	594	14.6
						*75	10.5	2.58	49.7	9.94	39.8	707	17.3
						*90	12.5	2.17	59.2	11.8	47.4	820	20.1
						*100	14.5	1.87	68.7	13.7	54.9	933	22.9
2	20	7.85	115	15.0	25.0	24	2.5	7.90	14.6	2.92	11.7	283	6.93
						28	3	6.58	17.5	3.51	14.0	314	7.70
						32	3.5	5.64	20.5	4.09	16.4	346	8.47
						38	4	4.94	23.4	4.68	18.7	377	9.24
						40	4.5	4.39	26.3	5.26	21.0	408	10.0
						48	5.5	3.59	32.2	6.43	25.7	471	11.6
						55	6.5	3.04	38.0	7.60	30.4	534	13.1
						65	7.5	2.63	43.8	8.77	35.1	597	14.6
						*75	8.5	2.32	49.7	9.94	39.8	660	16.2
						*90	10.5	1.88	61.4	12.3	49.1	786	19.3
						*105	12.5	1.58	73.1	14.6	58.5	911	22.3
						*120	14.5	1.36	84.8	17.0	67.8	1037	25.4
2	22	9.08	105	17.0	27.0	28	2.5	5.94	17.7	3.54	14.1	311	7.62
						32	3	4.95	21.2	4.24	17.0	346	8.47
						38	3.5	4.24	24.8	4.95	19.8	380	9.32

续表 2

mm

d	D	t ≈	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>3</sup> ) kg
2	22	9.08	105	17.0	27.0	42	4	3.71	28.3	5.66	22.6	415	10.2
						45	4.5	3.30	31.8	6.37	25.5	449	11.0
						55	5.5	2.70	38.9	7.78	31.1	518	12.7
						65	6.5	2.28	46.0	9.20	36.8	588	14.4
						75	7.5	1.98	53.1	10.6	42.4	657	16.1
						*85	8.5	1.75	60.1	12.0	48.1	726	17.8
						*100	10.5	1.41	74.3	14.9	59.4	864	21.2
						*120	12.5	1.19	88.4	17.7	70.7	1002	24.6
						*140	14.5	1.02	103	20.5	82.1	1141	28.0
2	25	11.0	92.4	20.0	30.0	32	2.5	4.04	22.8	4.57	18.3	353	8.66
						38	3	3.37	27.4	5.48	21.9	393	9.63
						45	3.5	2.89	32.0	6.39	25.6	432	10.6
						50	4	2.53	36.5	7.31	29.2	471	11.6
						55	4.5	2.25	41.1	8.22	32.9	511	12.5
						70	5.5	1.84	50.2	10.0	40.2	589	14.4
						80	6.5	1.56	59.4	11.9	47.5	668	16.4
						90	7.5	1.35	68.5	13.7	54.8	746	18.3
						*100	8.5	1.19	77.6	15.5	62.1	825	20.2
						*120	10.5	0.96	95.9	19.2	76.7	982	24.1
						*150	12.5	0.81	114	22.8	91.4	1139	27.9
						*170	14.5	0.70	132	26.5	106	1296	31.8
2	28	13.5	82.5	23.0	33.0	38	2.5	2.88	28.6	5.73	22.9	396	9.70
						45	3	2.40	34.4	6.88	27.5	440	10.8
						52	3.5	2.06	40.1	8.02	32.1	484	11.9
						58	4	1.80	45.8	9.17	36.7	528	12.9
						65	4.5	1.60	51.6	10.3	41.3	572	14.0
						80	5.5	1.31	63.0	12.6	50.4	660	16.2
						95	6.5	1.11	74.5	14.9	59.6	748	18.3
						*105	7.5	0.96	85.9	17.2	68.8	836	20.5
						*120	8.5	0.85	97.4	19.5	77.9	924	22.6
						*150	10.5	0.69	120	24.1	96.3	1100	27.0
						*170	12.5	0.58	143	28.6	115	1276	31.3
						*200	14.5	0.50	166	33.2	133	1452	35.6
2.5	12	4.13	363	7.5	16.5	16	2.5	89.3	4.07	0.81	3.25	170	6.50
						18	3	74.4	4.88	0.98	3.90	189	7.22
						20	3.5	63.8	5.69	1.14	4.55	207	7.94
						22	4	55.8	6.51	1.30	5.20	226	8.66
						24	4.5	49.6	7.32	1.46	5.86	245	9.38
						28	5.5	40.6	8.95	1.79	7.16	283	10.8
						32	6.5	34.3	10.6	2.11	8.46	320	12.3
						38	7.5	29.8	12.2	2.44	9.76	358	13.7
						40	8.5	26.3	13.8	2.77	11.1	396	15.2
						*50	10.5	21.3	17.1	3.42	13.7	471	18.0
						*58	12.5	17.9	20.3	4.07	16.3	547	20.9
						*65	14.5	15.4	23.6	4.72	18.9	622	23.8
						17	2.5	56.2	5.53	1.11	4.43	198	7.58
						20	3	46.9	6.64	1.33	5.31	220	8.42
						22	3.5	40.2	7.75	1.55	6.20	242	9.26
2.5	14	4.72	311	9.5	18.5	24	4	35.1	8.86	1.77	7.08	264	10.1
						28	4.5	31.2	9.96	1.99	7.97	286	10.9
						32	5.5	25.6	12.2	2.44	9.74	330	12.6

续表 2

mm

d	D	t ≈	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
2.5	14	4.72	311	9.5	18.5	38	6.5	21.6	14.4	2.88	11.5	374	14.3
						42	7.5	18.7	16.6	3.32	13.3	418	16.0
						45	8.5	16.5	18.8	3.76	15.1	462	17.7
						*55	10.5	13.4	23.2	4.65	18.6	550	21.1
						*65	12.5	11.2	27.7	5.53	22.1	638	24.4
						*75	14.5	9.69	32.1	6.42	25.7	726	27.8
2.5	16	5.40	273	11.5	20.5	19	2.5	37.7	7.23	1.45	5.78	226	8.66
						22	3	31.4	8.67	1.73	6.94	251	9.63
						24	3.5	26.9	10.1	2.02	8.10	276	10.6
						28	4	23.5	11.6	2.31	9.25	302	11.6
						30	4.5	20.9	13.0	2.60	10.4	327	12.5
						35	5.5	17.1	15.9	3.18	12.7	377	14.4
						40	6.5	14.5	18.8	3.76	15.0	427	16.4
						48	7.5	12.6	21.7	4.34	17.3	478	18.3
						52	8.5	11.1	24.6	4.92	19.7	528	20.2
						*65	10.5	8.97	30.4	6.07	24.3	628	24.1
						*75	12.5	7.53	36.1	7.23	28.9	729	27.9
2.5	18	6.17	242	13.5	22.5	*85	14.5	6.49	41.9	8.39	33.5	829	31.8
						20	2.5	26.5	9.15	1.83	7.32	255	9.75
						24	3	22.0	11.0	2.20	8.78	283	10.8
						28	3.5	18.9	12.8	2.56	10.2	311	11.9
						30	4	16.5	14.6	2.93	11.7	339	13.0
						35	4.5	14.7	16.5	3.29	13.2	368	14.1
						40	5.5	12.0	20.1	4.03	16.1	424	16.2
						48	6.5	10.2	23.8	4.76	19.0	481	18.4
						52	7.5	8.82	27.4	5.49	22.0	537	20.6
						58	8.5	7.78	31.1	6.22	24.9	594	22.7
						*70	10.5	6.30	38.4	7.69	30.7	707	27.1
2.5	20	7.02	218	14.5	25.5	*85	12.5	5.29	45.7	9.15	36.6	820	31.4
						*95	14.5	4.56	53.1	10.6	42.5	933	35.7
						24	2.5	19.3	11.3	2.26	9.04	283	10.8
						28	3	16.1	13.6	2.71	10.8	314	12.0
						30	3.5	13.8	15.8	3.16	12.7	346	13.2
						35	4	12.1	18.1	3.61	14.5	377	14.4
						38	4.5	10.7	20.3	4.07	16.3	408	15.6
						45	5.5	8.77	24.8	4.97	19.9	471	18.0
						52	6.5	7.42	29.4	5.87	23.5	534	20.5
						58	7.5	6.43	33.9	6.78	27.1	597	22.9
						65	8.5	5.67	38.4	7.68	30.7	660	25.3
2.5	22	7.98	1.98	16.5	27.5	*80	10.5	4.59	47.4	9.49	38.0	786	30.1
						*95	12.5	3.86	56.5	11.3	45.2	911	34.9
						*110	14.5	3.33	65.5	13.1	52.4	1037	39.7
						26	2.5	14.5	13.7	2.73	10.9	311	11.9
						30	3	12.1	16.4	3.28	13.1	346	13.2
						35	3.5	10.4	19.1	3.83	15.3	380	14.6
						38	4	9.06	21.9	4.37	17.5	415	15.9
						42	4.5	8.05	24.6	4.92	19.7	449	17.2
						50	5.5	6.59	30.1	6.01	24.1	518	19.9
						58	6.5	5.57	35.5	7.11	28.4	588	22.5
						65	7.5	4.83	41.0	8.20	32.8	657	25.1
						75	8.5	4.26	46.5	9.29	37.2	726	27.8

68

普通圆柱螺旋压缩弹簧

编号 Q81 1A

共 34 页

第 14 页

续表 2

mm

d	D	t ≈	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
2.5	24	7.98	1.98	16.5	27.5	*90	10.5	3.45	57.4	11.5	45.9	864	33.1
						*105	12.5	2.90	68.3	13.7	54.7	1002	38.4
						*120	14.5	2.50	79.3	15.9	63.4	1141	43.7
2.5	25	9.57	174	19.5	30.5	30	2.5	9.88	17.6	3.53	14.1	353	13.5
						35	3	8.23	21.2	4.24	16.9	393	15.0
						40	3.5	7.05	24.7	4.94	19.8	432	16.5
						45	4	6.17	28.2	5.65	22.6	471	18.0
						48	4.5	5.49	31.8	6.35	25.4	511	19.6
						58	5.5	4.49	38.8	7.77	31.1	589	22.6
						70	6.5	3.80	45.9	9.18	36.7	668	25.6
						80	7.5	3.29	52.9	10.6	42.4	746	28.6
						90	8.5	2.90	60.0	12.0	48.0	825	31.6
						*105	10.5	2.35	74.1	14.8	59.3	982	37.6
						*120	12.5	1.98	88.2	17.6	70.6	1139	43.6
						*140	14.5	1.70	102	20.5	81.9	1296	49.6
2.5	28	11.4	156	22.5	33.5	32	2.5	7.03	22.1	4.43	17.7	396	15.2
						40	3	5.86	26.6	5.31	21.3	440	16.8
						45	3.5	5.02	31.0	6.20	24.8	484	18.5
						52	4	4.39	35.4	7.08	28.3	528	20.2
						58	4.5	3.90	39.8	7.97	31.9	572	21.9
						70	5.5	3.19	48.7	9.74	39.0	660	25.3
						80	6.5	2.70	57.6	11.5	46.0	748	28.6
						90	7.5	2.34	66.4	13.3	53.1	836	32.0
						*105	8.5	2.07	75.3	15.1	60.2	924	35.4
						*120	10.5	1.67	93.0	18.6	74.4	1100	42.1
						*150	12.5	1.41	111	22.1	88.6	1276	48.8
						*170	14.5	1.21	128	25.7	103	1452	55.6
2.5	30	12.7	14.5	24.5	35.5	38	2.5	5.71	25.4	5.08	20.3	424	16.2
						45	3	4.76	30.5	6.10	24.4	471	18.0
						50	3.5	4.08	35.6	7.12	28.5	518	19.9
						58	4	3.57	40.7	8.13	32.5	566	21.7
						65	4.5	3.17	45.7	9.15	36.6	613	23.5
						75	5.5	2.60	55.9	11.2	44.7	707	27.1
						90	6.5	2.20	66.1	13.2	52.9	801	30.7
						100	7.5	1.90	76.2	15.2	61.0	895	34.3
						*115	8.5	1.68	86.4	17.3	69.1	990	37.9
						*140	10.5	1.36	107	21.3	85.4	1178	45.1
						*160	12.5	1.14	127	25.4	102	1367	52.3
						*190	14.5	0.99	147	29.5	118	1555	59.6
2.5	32	14.1	136	25.5	38.5	40	2.5	4.71	29.0	5.80	23.2	452	17.4
						48	3	3.92	34.7	6.94	27.8	503	19.4
						55	3.5	3.36	40.5	8.10	32.4	553	21.3
						60	4	2.94	46.3	9.26	37.0	603	23.2
						70	4.5	3.17	45.7	9.15	36.6	613	23.5
						85	5.5	2.60	55.9	11.2	44.7	707	27.1
						100	6.5	2.20	66.1	13.2	52.9	801	30.7
						110	7.5	1.90	76.2	15.2	61.0	895	34.3
						*130	8.5	1.68	86.4	17.3	69.1	990	37.9
						*160	10.5	1.36	107	21.3	85.4	1178	45.1
						*180	12.5	1.14	127	25.4	102	1367	52.3
						*200	14.5	0.99	147	29.5	118	1555	59.6

普通圆柱螺旋压缩弹簧

编号 Q81 - 1A

共 34 页

第 15 页

续表 2

mm

d	D	t ≈	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
3	14	4.78	519	9.0	19.0	18	2.5	117	4.45	0.89	3.56	198	10.9
						20	3	97.2	5.34	1.07	4.27	220	12.1
						24	3.5	83.3	6.23	1.25	4.98	242	13.3
						26	4	72.9	7.12	1.42	5.70	264	14.6
						28	4.5	64.8	8.01	1.60	6.41	286	15.8
						35	5.5	53.0	9.79	1.96	7.83	330	18.2
						38	6.5	44.8	11.6	2.31	9.26	374	20.6
						42	7.5	38.9	13.3	2.67	10.7	418	23.0
						48	8.5	34.3	15.1	3.03	12.1	462	25.5
						*58	10.5	27.8	18.7	3.74	15.0	550	30.3
						*65	12.5	23.3	22.2	4.45	17.8	638	35.2
						*75	14.5	20.1	25.8	5.16	20.6	726	40.0
3	16	5.33	454	11.0	21.0	20	2.5	78.1	5.81	1.16	4.65	226	12.5
						22	3	65.1	6.97	1.39	5.58	251	13.9
						25	3.5	55.8	8.14	1.63	6.51	276	15.2
						28	4	48.8	9.30	1.86	7.44	302	16.6
						30	4.5	43.4	10.5	2.09	8.37	327	18.0
						35	5.5	35.5	12.8	2.56	10.2	377	20.8
						40	6.5	30.0	15.1	3.02	12.1	427	23.6
						45	7.5	26.0	17.4	3.49	13.9	478	26.3
						52	8.5	23.0	19.8	3.95	15.8	528	29.1
						*65	10.5	18.6	24.4	4.88	19.5	628	34.7
						*75	12.5	15.6	29.1	5.81	23.2	729	40.2
						*85	14.5	13.5	33.7	6.74	27.0	829	45.7
3	18	5.94	403	13.0	23.0	22	2.5	54.9	7.36	1.47	5.88	255	14.0
						24	3	45.7	8.83	1.77	7.06	283	15.6
						28	3.5	39.2	10.3	2.06	8.24	311	17.2
						30	4	34.3	11.8	2.35	9.42	339	18.7
						35	4.5	30.5	13.2	2.65	10.6	368	20.3
						40	5.5	24.9	16.2	3.24	12.9	424	23.4
						45	6.5	21.1	19.1	3.83	15.3	481	26.5
						52	7.5	18.3	22.1	4.41	17.7	537	29.6
						58	8.5	16.1	25.0	5.00	20.0	594	32.7
						*70	10.5	13.1	30.9	6.18	24.7	707	39.0
						*80	12.5	11.0	36.8	7.36	29.4	820	45.2
						*95	14.5	9.46	42.7	8.53	34.1	933	51.5
3	20	6.63	363	14.0	26.0	24	2.5	40.0	9.08	1.82	7.27	283	15.6
						26	3	33.3	10.9	2.18	8.72	314	17.3
						30	3.5	28.6	12.7	2.54	10.2	346	19.1
						35	4	25.0	14.5	2.91	11.6	377	20.8
						38	4.5	22.2	16.3	3.27	13.1	408	22.5
						45	5.5	18.2	20.0	4.00	16.0	471	26.0
						50	6.5	15.4	23.6	4.72	18.9	534	29.5
						58	7.5	13.3	27.2	5.45	21.8	597	32.9
						65	8.5	11.8	30.9	6.18	24.7	660	36.4
						*75	10.5	9.52	38.1	7.63	30.5	786	43.3
						*90	12.5	8.00	45.4	9.08	36.3	911	50.2
						*105	14.5	6.90	52.7	10.5	42.1	1037	57.2
3	22	7.40	330	16.0	28.0	24	2.5	30.0	11.0	2.20	8.79	311	17.2
						30	3	25.0	13.2	2.64	10.5	346	19.1
						32	3.5	21.5	15.4	3.08	12.3	380	21.0

续表 2

mm

d	D	t s	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
3	22	7.40	330	16.0	28.0	38	4	18.8	17.6	3.52	14.1	415	22.9
						40	4.5	16.7	19.8	3.96	15.8	449	24.8
						48	5.5	13.7	24.2	4.83	19.3	518	28.6
						58	6.5	11.6	28.6	5.71	22.9	588	32.4
						65	7.5	10.0	33.0	6.59	26.4	657	36.2
						70	8.5	8.84	37.4	7.47	29.9	726	40.0
						*85	10.5	7.15	46.2	9.23	36.9	864	47.6
						*100	12.5	6.01	54.9	11.0	44.0	1002	55.3
3	25	8.67	290	19.0	31.0	*115	14.5	5.18	63.7	12.7	51.0	1141	62.9
						28	2.5	20.5	14.2	2.84	11.4	353	19.5
						32	3	17.1	17.0	3.41	13.6	393	21.7
						38	3.5	14.6	19.9	3.97	15.9	432	23.8
						42	4	12.8	22.7	4.54	18.2	471	26.0
						45	4.5	11.4	25.5	5.11	20.4	511	28.2
						55	5.5	9.31	31.2	6.24	25.0	589	32.5
						65	6.5	7.88	36.9	7.38	29.5	668	36.8
						70	7.5	6.83	42.6	8.51	34.1	746	41.1
						80	8.5	6.02	48.2	9.65	38.6	825	45.5
						*100	10.5	4.88	59.6	11.9	47.7	982	54.1
						*115	12.5	4.10	70.9	14.2	56.8	1139	62.8
3	28	10.1	259	22.0	34.0	*130	14.5	3.53	82.3	16.5	65.8	1296	71.5
						32	2.5	14.6	17.8	3.56	14.2	396	21.8
						38	3	12.1	21.4	4.27	17.1	440	24.3
						42	3.5	10.4	24.9	4.98	19.9	484	26.7
						48	4	9.11	28.5	5.70	22.8	528	29.1
						52	4.5	8.10	32.0	6.41	25.6	572	31.5
						60	5.5	6.62	39.2	7.83	31.3	660	36.4
						70	6.5	5.61	46.3	9.26	37.0	748	41.2
						80	7.5	4.86	53.4	10.7	42.7	836	46.1
						95	8.5	4.29	60.5	12.1	48.4	924	50.9
						*115	10.5	3.47	74.8	15.0	59.8	1100	60.6
						*140	12.5	2.92	89.0	17.8	71.2	1276	70.3
3	30	11.2	242	24.0	36.0	*160	14.5	2.51	103	20.6	82.6	1452	80.0
						35	2.5	11.9	20.4	4.09	16.3	424	23.4
						40	3	9.88	24.5	4.90	19.6	471	26.0
						48	3.5	8.46	28.6	5.72	22.9	518	28.6
						52	4	7.41	32.7	6.54	26.2	566	31.2
						58	4.5	6.58	36.8	7.36	29.4	613	33.8
						70	5.5	5.39	45.0	8.99	36.0	707	39.0
						80	6.5	4.56	53.1	10.6	42.5	801	44.2
						90	7.5	3.95	61.3	12.3	49.0	895	49.4
						100	8.5	3.49	69.5	13.9	55.6	990	54.6
						*120	10.5	2.82	85.8	17.2	68.7	1178	65.0
						*150	12.5	2.37	102	20.4	81.7	1367	75.4
3	32	12.3	227	25.0	39.0	*170	14.5	2.04	119	23.7	94.8	1555	85.8
						38	2.5	9.76	23.2	4.65	18.6	452	24.9
						45	3	8.14	27.9	5.58	22.3	503	27.7
						50	3.5	6.97	32.5	6.51	26.0	553	30.5
						55	4	6.10	37.2	7.44	29.8	603	33.3
						60	4.5	5.42	41.8	8.37	33.5	654	36.0
						75	5.5	4.44	51.1	10.2	40.9	754	41.6



续表 2

mm

d	D	t ≈	P <sub>s</sub> N	D <sub>x<sub>max</sub></sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
3	32	12.3	227	25.0	39.0	90	6.5	3.76	60.4	12.1	48.4	855	47.1
						100	7.5	3.25	69.7	13.9	55.8	955	52.7
						110	8.5	2.87	79.0	15.8	63.2	1056	58.2
						*140	10.5	2.32	97.6	19.5	78.1	1257	69.3
						*160	12.5	1.95	116	23.2	93.0	1458	80.4
						*190	14.5	1.68	135	27.0	108	1659	91.5
3	35	14.1	207	28.0	42.0	42	2.5	7.46	27.8	5.56	22.2	495	27.3
						50	3	6.22	33.4	6.67	26.7	550	30.3
						55	3.5	5.33	38.9	7.79	31.1	605	33.4
						65	4	4.66	44.5	8.90	35.6	660	36.4
						70	4.5	4.15	50.1	10.0	40.0	715	39.4
						85	5.5	3.39	61.2	12.2	48.9	825	45.5
						95	6.5	2.87	72.3	14.5	57.8	935	51.5
						115	7.5	2.49	83.4	16.7	66.7	1045	57.6
						*130	8.5	2.19	94.6	18.9	75.6	1155	63.7
						*160	10.5	1.78	117	23.4	93.4	1375	75.8
						*180	12.5	1.49	139	27.8	111	1595	87.9
						*210	14.5	1.29	161	32.3	129	1815	100.1
3	38	16.1	191	31.0	45.0	48	2.5	5.83	32.8	6.56	26.2	537	29.6
						55	3	4.86	39.3	7.87	31.5	597	32.9
						65	3.5	4.16	45.9	9.18	36.7	657	36.2
						70	4	3.64	52.5	10.5	42.0	716	39.5
						80	4.5	3.24	59.0	11.8	47.2	776	42.8
						95	5.5	2.65	72.1	14.4	57.7	895	49.4
						115	6.5	2.24	85.2	17.0	68.2	1015	56.0
						130	7.5	1.94	98.4	19.7	78.7	1134	62.5
						140	8.5	1.71	111	22.3	89.2	1254	69.1
						*180	10.5	1.39	138	27.5	110	1492	82.3
						*200	12.5	1.17	164	32.8	131	1731	95.5
						*240	14.5	1.01	190	38.0	152	1970	108.6
4	20	6.63	831	13.0	27.0	26	2.5	126	6.56	1.31	5.25	283	27.7
						28	3	105	7.87	1.57	6.30	314	30.8
						32	3.5	90.3	9.19	1.84	7.35	346	33.9
						35	4	79.0	10.5	2.10	8.40	377	37.0
						38	4.5	70.2	11.8	2.36	9.45	408	40.0
						45	5.5	57.5	14.4	2.89	11.5	471	46.2
						52	6.5	48.6	17.1	3.41	13.6	534	52.4
						58	7.5	42.1	19.7	3.94	15.7	597	58.5
						65	8.5	37.2	22.3	4.46	17.8	660	64.7
						*80	10.5	30.1	27.6	5.51	22.0	786	77.0
						*90	12.5	25.3	32.8	6.56	26.2	911	89.3
						*105	14.5	21.8	38.1	7.61	30.4	1037	101.6
4	22	7.18	756	15.0	29.0	26	2.5	95.0	7.94	1.59	6.35	311	30.5
						30	3	79.1	9.53	1.91	7.62	346	33.9
						35	3.5	67.8	11.1	2.22	8.89	380	37.3
						38	4	59.4	12.7	2.54	10.2	415	40.7
						40	4.5	52.8	14.3	2.86	11.4	449	44.0
						48	5.5	43.2	17.5	3.49	14.0	518	50.8
						55	6.5	36.5	20.6	4.13	16.5	588	57.6
						60	7.5	31.7	23.8	4.76	19.1	657	64.4
						70	8.5	27.9	27.0	5.40	21.6	726	71.2

续表 2

mm

d	D	$t \approx$	Ps N	$D_{x\max}$	$D_{T\min}$	$H_0$	n 圈	P' N/mm	Fs	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
4	22	7.18	756	15.0	29.0	*85	10.5	22.6	33.4	6.67	26.7	864	84.7
						*100	12.5	19.0	39.7	7.94	31.8	1002	98.3
						*115	14.5	16.4	46.1	9.21	36.8	1141	111.8
4	25	8.11	665	18.0	32.0	28	2.5	64.7	10.3	2.05	8.20	353	34.7
						32	3	53.9	12.3	2.46	9.84	393	38.5
						38	3.5	46.2	14.4	2.87	11.5	432	42.4
						42	4	40.4	16.4	3.28	13.1	471	46.2
						45	4.5	36.0	18.5	3.69	14.8	511	50.1
						55	5.5	29.4	22.6	4.51	18.0	589	57.8
						60	6.5	24.9	26.7	5.33	21.3	668	65.5
						70	7.5	21.6	30.8	6.15	24.6	746	73.2
						80	8.5	19.0	34.9	6.97	27.9	825	80.9
						*95	10.5	15.4	43.1	8.61	34.5	982	96.3
						*110	12.5	12.9	51.3	10.3	41.0	1139	111.7
						*130	14.5	11.2	59.5	11.9	47.6	1296	127.1
4	28	9.16	594	21.0	35.0	32	2.5	46.1	12.9	2.57	10.3	396	38.8
						35	3	38.4	15.4	3.09	12.3	440	43.1
						40	3.5	32.9	18.0	3.60	14.4	484	47.4
						45	4	28.8	20.6	4.12	16.5	528	51.7
						50	4.5	25.6	23.2	4.63	18.5	572	56.1
						60	5.5	20.9	28.3	5.66	22.6	660	64.7
						70	6.5	17.7	33.4	6.69	26.8	748	73.3
						80	7.5	15.4	38.6	7.72	30.9	836	81.9
						90	8.5	13.5	43.7	8.75	35.0	924	90.6
						*105	10.5	11.0	54.0	10.8	43.2	1100	107.8
						*130	12.5	9.21	64.3	12.9	51.4	1276	125.1
						*140	14.5	7.94	74.6	14.9	59.7	1452	142.3
4	30	9.92	554	23.0	37.0	32	2.5	37.5	14.8	2.95	11.8	424	41.6
						38	3	31.2	17.7	3.54	14.2	471	46.2
						45	3.5	26.8	20.7	4.13	16.5	518	50.8
						48	4	23.4	23.6	4.72	18.9	566	55.4
						55	4.5	20.8	26.6	5.32	21.3	613	60.1
						65	5.5	17.0	32.5	6.50	26.0	707	69.3
						75	6.5	14.4	38.4	7.68	30.7	801	78.5
						85	7.5	12.5	44.3	8.86	35.4	895	87.8
						95	8.5	11.0	50.2	10.0	40.2	990	97.0
						*115	10.5	8.92	62.0	12.4	49.6	1178	115.5
						*140	12.5	7.49	73.8	14.8	59.1	1367	134.0
						*160	14.5	6.46	85.6	17.1	68.5	1555	152.5
4	32	10.7	520	24.0	40.0	35	2.5	30.9	16.8	3.36	13.4	452	44.4
						40	3	25.7	20.2	4.03	16.1	503	49.3
						45	3.5	22.0	23.5	4.70	18.8	553	54.2
						52	4	19.3	26.9	5.38	21.5	603	59.1
						58	4.5	17.1	30.2	6.05	24.2	654	64.1
						70	5.5	14.0	37.0	7.39	29.6	754	73.9
						80	6.5	11.9	43.7	8.74	34.9	855	83.8
						90	7.5	10.3	50.4	10.1	40.3	955	93.6
						100	8.5	9.08	57.1	11.4	45.7	1056	103.5
						*120	10.5	7.35	70.6	14.1	56.4	1257	123.2
						*150	12.5	6.17	84.0	16.8	67.2	1458	142.9
						*170	14.5	5.32	97.4	19.5	78.0	1659	162.6

续表 2

mm

d	D	t ≈	P <sub>s</sub> N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>3</sup> ) kg
4	35	12.1	475	27.0	43.0	38	2.5	23.6	20.1	4.02	16.1	495	48.5
						45	3	19.7	24.1	4.82	19.3	550	53.9
						52	3.5	16.8	28.1	5.63	22.5	605	59.3
						58	4	14.7	32.2	6.43	25.7	660	64.7
						65	4.5	13.1	36.2	7.24	28.9	715	70.1
						75	5.5	10.7	44.2	8.84	35.4	825	80.9
						90	6.5	9.07	52.3	10.5	41.8	935	91.6
						100	7.5	7.86	60.3	12.1	48.2	1045	102.4
						115	8.5	6.94	68.3	13.7	54.7	1155	113.2
						*140	10.5	5.62	84.4	16.9	67.5	1375	134.8
						*160	12.5	4.72	100	20.1	80.4	1595	156.3
						*180	14.5	4.07	117	23.3	93.3	1815	177.9
4	38	13.5	438	30.0	46.0	42	2.5	18.4	23.7	4.74	19.0	537	52.7
						50	3	15.4	28.4	5.69	22.7	597	58.5
						58	3.5	13.2	33.2	6.63	26.5	657	64.4
						65	4	11.5	37.9	7.58	30.3	716	70.2
						70	4.5	10.2	42.6	8.53	34.1	776	76.1
						85	5.5	8.38	52.1	10.4	41.7	895	87.8
						100	6.5	7.09	61.6	12.3	49.3	1015	99.5
						110	7.5	6.14	71.1	14.2	56.9	1134	111.2
						130	8.5	5.42	80.5	16.1	64.4	1254	122.9
						*150	10.5	4.39	99.5	19.9	79.6	1492	146.3
						*180	12.5	3.69	118	23.7	94.8	1731	169.7
						*200	14.5	3.18	137	27.5	110	1970	193.1
4	40	14.5	416	32.0	48.0	45	2.5	15.8	26.2	5.25	21.0	566	55.4
						52	3	13.2	31.5	6.30	25.2	628	61.6
						60	3.5	11.3	36.7	7.35	29.4	691	67.8
						70	4	9.88	42.0	8.40	33.6	754	73.9
						75	4.5	8.78	47.2	9.45	37.8	817	80.1
						90	5.5	7.18	57.7	11.5	46.2	943	92.4
						105	6.5	6.08	68.2	13.6	54.6	1068	105
						120	7.5	5.27	78.7	15.7	63.0	1194	117
						130	8.5	4.65	89.2	17.8	71.4	1320	129
						*160	10.5	3.76	110	22.0	88.2	1571	154
						*190	12.5	3.16	131	26.2	105	1822	179
						*220	14.5	2.72	152	30.4	122	2074	203
4	45	17.3	370	37.0	53.0	52	2.5	11.1	33.2	6.64	26.6	636	62.4
						60	3	9.25	39.9	7.97	31.9	707	69.3
						70	3.5	7.93	46.5	9.30	37.2	778	76.2
						80	4	6.94	53.2	10.6	42.5	848	83.2
						90	4.5	6.16	59.8	12.0	47.8	919	90.1
						105	5.5	5.04	73.1	14.6	58.5	1060	104
						120	6.5	4.27	86.4	17.3	69.1	1202	118
						140	7.5	3.70	99.7	19.9	79.7	1343	132
						160	8.5	3.26	113	22.6	90.4	1485	146
						*190	10.5	2.64	140	27.9	112	1767	173
						*230	12.5	2.22	166	33.2	133	2050	201
						*260	14.5	1.91	193	38.5	154	2333	229
4	50	20.5	333	42.0	58	60	2.5	8.09	41.0	8.20	32.8	707	69.3
						70	3	6.74	49.2	9.84	39.4	786	77.0
						80	3.5	5.78	57.4	11.5	45.9	864	84.7

## 普通圆柱螺旋压缩弹簧

编号 Q81 — 1A

共 34 页

第 20 页

续表 2

mm

d	D	t ≈	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m(10 <sup>-3</sup> ) kg
4	50	20.5	333	42.0	58.0	90	4	5.06	65.6	13.1	52.5	943	92.4
						100	4.5	4.49	73.8	14.8	59.1	1021	100
						120	5.5	3.68	90.2	18.0	72.2	1178	116
						140	6.5	3.11	107	21.3	85.3	1335	131
						160	7.5	2.70	123	24.6	98.4	1492	146
						180	8.5	2.38	139	27.9	112	1650	162
						*220	10.5	1.93	172	34.5	138	1964	193
						*260	12.5	1.62	205	41.0	164	2278	223
						*300	14.5	1.39	238	47.6	190	2592	254
5	25	8.29	1299	17.0	33.0	30	2.5	158	8.20	1.64	6.56	353	54.1
						35	3	132	9.84	1.97	7.87	393	60.2
						40	3.5	113	11.5	2.30	9.19	432	66.2
						45	4	98.8	13.1	2.62	10.5	471	72.2
						48	4.5	87.8	14.8	2.95	11.8	511	78.2
						55	5.5	71.8	18.0	3.61	14.4	589	90.2
						65	6.5	60.8	21.3	4.27	17.1	668	102
						70	7.5	52.7	24.6	4.92	19.7	746	114
						80	8.5	46.5	27.9	5.58	22.3	825	126
						*100	10.5	37.6	34.5	6.89	27.6	982	150
						*115	12.5	31.6	41.0	8.20	32.8	1139	174
5	28	9.12	1160	20.0	36.0	*130	14.5	27.2	47.6	9.52	38.1	1296	199
						32	2.5	112	10.3	2.06	8.23	396	60.6
						38	3	93.7	12.3	2.47	9.88	440	67.4
						42	3.5	80.3	14.4	2.88	11.5	484	74.1
						48	4	70.3	16.5	3.29	13.2	528	80.9
						52	4.5	62.5	18.5	3.70	14.8	572	87.6
						60	5.5	51.1	22.6	4.53	18.1	660	101
						70	6.5	43.3	26.8	5.35	21.4	748	115
						80	7.5	37.5	30.9	6.17	24.7	836	128
						90	8.5	33.1	35.0	7.00	28.0	924	141
						*105	10.5	26.8	43.2	8.64	34.6	1100	168
5	30	9.74	1083	22.0	38.0	*120	12.5	22.5	51.4	10.3	41.2	1276	195
						*140	14.5	19.4	59.7	11.9	47.7	1452	222
						35	2.5	91.4	11.8	2.36	9.45	424	65.0
						40	3	76.2	14.2	2.83	11.3	471	72.2
						45	3.5	65.3	16.5	3.31	13.2	518	79.4
						50	4	57.1	18.9	3.78	15.1	566	86.6
						55	4.5	50.8	21.3	4.25	17.0	613	93.8
						65	5.5	41.6	26.0	5.20	20.8	707	108
						75	6.5	35.2	30.7	6.14	24.6	801	123
						85	7.5	30.5	35.4	7.09	28.3	895	137
						95	8.5	26.9	40.2	8.03	32.1	990	152
5	30	9.74	1083	22.0	38.0	*115	10.5	21.8	49.6	9.92	39.7	1178	180
						*130	12.5	18.3	59.1	11.8	47.2	1367	209
						*150	14.5	15.8	68.5	13.7	54.8	1555	238

续表 2

mm

d	D	t	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
5	32	10.4	1015	23.0	41.0	38	2.5	75.3	13.4	2.69	10.8	452	0.0693
						42	3	62.8	16.1	3.23	12.9	503	0.0770
						48	3.5	53.8	18.8	3.76	15.1	553	0.0847
						52	4	47.1	21.5	4.30	17.2	603	0.0924
						58	4.5	41.9	24.2	4.84	19.4	654	0.100
						70	5.5	34.2	29.6	5.91	23.7	754	0.116
						80	6.5	29.0	34.9	6.99	28.0	855	0.131
						90	7.5	25.1	40.3	8.06	32.3	955	0.146
						100	8.5	22.2	45.7	9.14	36.6	1056	0.162
						*120	10.5	17.9	56.4	11.3	45.2	1257	0.193
						*140	12.5	15.1	67.2	13.4	53.8	1458	0.223
						*160	14.5	13.0	78.0	15.6	62.4	1659	0.254
5	35	11.5	928	26.0	44.0	38	2.5	57.6	16.1	3.22	12.9	495	0.0758
						45	3	48.0	19.3	3.86	15.4	550	0.0842
						50	3.5	41.1	22.5	4.50	18.0	605	0.0926
						55	4	36.0	25.7	5.14	20.6	660	0.101
						60	4.5	32.0	28.9	5.79	23.2	715	0.109
						75	5.5	26.2	35.4	7.07	28.3	825	0.126
						85	6.5	22.1	41.8	8.36	33.4	935	0.143
						95	7.5	19.2	48.2	9.65	38.6	1045	0.160
						110	8.5	16.9	54.7	10.9	43.7	1155	0.177
						*130	10.5	13.7	67.5	13.5	54.0	1375	0.211
						*150	12.5	11.5	80.4	16.1	64.3	1595	0.244
						*180	14.5	9.93	93.3	18.7	74.6	1815	0.278
5	38	12.6	855	29.0	47.0	42	2.5	45.0	19.0	3.79	15.2	537	0.0823
						48	3	37.5	22.7	4.55	18.2	597	0.0914
						55	3.5	32.1	26.5	5.31	21.2	657	0.101
						60	4	28.1	30.3	6.06	24.3	716	0.110
						65	4.5	25.0	34.1	6.82	27.3	776	0.119
						80	5.5	20.5	41.7	8.34	33.4	895	0.137
						90	6.5	17.3	49.3	9.86	39.4	1015	0.155
						105	7.5	15.0	56.9	11.4	45.5	1134	0.174
						120	8.5	13.2	64.4	12.9	51.6	1254	0.192
						140	10.5	10.7	79.6	15.9	63.7	1492	0.229
						170	12.5	9.00	94.8	19.0	75.8	1731	0.265
						190	14.5	7.76	110	22.0	87.9	1970	0.302
5	40	13.4	812	31.0	49.0	45	2.5	38.6	21.0	4.20	16.8	566	0.0866
						50	3	32.1	25.2	5.04	20.2	628	0.0963
						58	3.5	27.6	29.4	5.88	23.5	691	0.106
						65	4	24.1	33.6	6.72	26.9	754	0.116
						70	4.5	21.4	37.8	7.56	30.2	817	0.125
						85	5.5	17.5	46.2	9.24	37.0	943	0.144
						100	6.5	14.8	54.6	10.9	43.7	1068	0.164
						110	7.5	12.9	63.0	12.6	50.4	1194	0.183
						130	8.5	11.3	71.4	14.3	57.1	1320	0.202
						*150	10.5	9.18	88.2	17.6	70.6	1571	0.241
						*180	12.5	7.71	105	21.0	84.0	1822	0.279
						*210	14.5	6.65	122	24.4	97.4	2074	0.318
5	45	15.7	722	36.0	54.0	50	2.5	27.1	26.6	5.32	21.3	636	0.0975
						58	3	22.6	31.9	6.38	25.5	707	0.108

续表 2

mm

d	D	t	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	Fs	F <sub>1</sub>	F <sub>2</sub>	L	m kg
5	45	15.7	722	36.0	54.0	65	3.5	19.4	37.2	7.44	29.8	778	0.119
						75	4	16.9	42.5	8.50	34.0	848	0.130
						80	4.5	15.1	47.8	9.57	38.3	919	0.141
						95	5.5	12.3	58.5	11.7	46.8	1060	0.162
						115	6.5	10.4	69.1	13.8	55.3	1202	0.184
						130	7.5	9.03	79.7	15.9	63.8	1343	0.206
						140	8.5	7.97	90.4	18.1	72.3	1485	0.227
						*180	10.5	6.45	112	22.3	89.3	1767	0.271
						*200	12.5	5.42	133	26.6	106	2050	0.314
						*240	14.5	4.67	154	30.8	123	2333	0.357
5	50	18.2	650	41.0	59.0	55	2.5	19.8	32.8	6.56	26.2	707	0.108
						65	3	16.5	39.4	7.87	31.5	786	0.120
						75	3.5	14.1	45.9	9.19	36.7	864	0.132
						85	4	12.3	52.5	10.5	42.0	943	0.144
						95	4.5	11.0	59.1	11.8	47.2	1021	0.156
						110	5.5	8.98	72.2	14.4	57.7	1178	0.180
						130	6.5	7.60	85.3	17.1	68.2	1335	0.205
						150	7.5	6.58	98.4	19.7	78.7	1492	0.229
						170	8.5	5.81	112	22.3	89.2	1650	0.253
						*200	10.5	4.70	138	27.6	110	1964	0.301
						*240	12.5	3.95	164	32.8	131	2278	0.349
						*280	14.5	3.41	190	38.1	152	2592	0.397
5	55	20.9	591	45.0	65.0	65	2.5	14.8	39.7	7.94	31.8	778	0.119
						75	3	12.4	47.6	9.53	38.1	864	0.132
						85	3.5	10.6	55.6	11.1	44.5	950	0.146
						95	4	9.27	63.5	12.7	50.8	1037	0.159
						105	4.5	8.24	71.5	14.3	57.2	1123	0.172
						130	5.5	6.74	87.3	17.5	69.9	1296	0.199
						150	6.5	5.71	103	20.6	82.6	1469	0.225
						170	7.5	4.95	119	23.8	95.3	1642	0.251
						190	8.5	4.36	135	27.0	108	1815	0.278
						*240	10.5	3.53	167	33.4	133	2160	0.331
						*280	12.5	2.97	199	39.7	159	2506	0.384
						*320	14.5	2.56	230	46.1	184	2851	0.437
5	60	24.0	541	50.0	70.0	70	2.5	11.4	47.2	9.45	37.8	848	0.130
						85	3	9.52	56.7	11.3	45.4	943	0.144
						95	3.5	8.16	66.1	13.2	52.9	1037	0.159
						105	4	7.14	75.6	15.1	60.5	1131	0.173
						120	4.5	6.35	85.0	17.0	68.0	1225	0.188
						150	5.5	5.20	104	20.8	83.2	1414	0.217
						170	6.5	4.40	123	24.6	98.3	1602	0.245
						190	7.5	3.81	142	28.3	113	1791	0.274
						220	8.5	3.36	161	32.1	129	1979	0.303
						*260	10.5	2.72	198	39.7	159	2357	0.361
						*300	12.5	2.29	236	47.2	189	2734	0.419
						*360	14.5	1.97	274	54.8	219	3111	0.476
6	30	9.66	1732	21.0	39.0	38	2.5	190	9.10	1.82	7.28	424	0.0936
						42	3	158	10.9	2.18	8.73	471	0.104
						45	3.5	135	12.7	2.55	10.2	518	0.114
						50	4	119	14.6	2.91	11.6	566	0.125
						55	4.5	105	16.4	3.28	13.1	613	0.135
						65	5.5	86.2	20.0	4.00	16.0	707	0.156

续表 2

mm

d	D	t	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	Fs	F <sub>1</sub>	F <sub>2</sub>	L	m kg
6	30	9.66	1732	21	39	75	6.5	72.9	23.7	4.73	18.9	801	0.177
						85	7.5	63.2	27.3	5.46	21.8	895	0.198
						95	8.5	55.8	30.9	6.19	24.7	990	0.218
						*115	10.5	45.1	38.2	7.64	30.6	1178	0.260
						*130	12.5	37.9	45.5	9.10	36.4	1367	0.301
						*150	14.5	32.7	52.8	10.6	42.2	1555	0.343
6	32	10.2	1624	22.0	42.0	38	2.5	156	10.4	2.07	8.28	452	0.0998
						42	3	130	12.4	2.48	9.94	503	0.111
						48	3.5	112	14.5	2.90	11.6	553	0.122
						52	4	97.6	16.6	3.31	13.2	603	0.133
						58	4.5	86.8	18.6	3.73	14.9	654	0.144
						70	5.5	71.0	22.8	4.55	18.2	754	0.166
						80	6.5	60.1	26.9	5.38	21.5	855	0.189
						90	7.5	52.1	31.1	6.21	24.8	955	0.211
						100	8.5	45.9	35.2	7.04	28.2	1056	0.233
						*120	10.5	37.2	43.5	8.70	34.8	1257	0.277
						*140	12.5	31.2	51.8	10.4	41.4	1458	0.322
						*160	14.5	26.9	60.0	12.0	48.0	1659	0.366
6	35	11.0	1485	25.0	45.0	40	2.5	119	12.4	2.48	9.91	495	0.109
						45	3	99.5	14.9	2.97	11.9	550	0.121
						50	3.5	85.3	17.3	3.47	13.9	605	0.133
						58	4	74.6	19.8	3.96	15.9	660	0.146
						60	4.5	66.3	22.3	4.46	17.8	715	0.158
						70	5.5	54.3	27.2	5.45	21.8	825	0.182
						85	6.5	45.9	32.2	6.44	25.8	935	0.206
						95	7.5	39.8	37.1	7.43	29.7	1045	0.230
						105	8.5	35.1	42.1	8.42	33.7	1155	0.255
						*130	10.5	28.4	52.0	10.4	41.6	1375	0.303
						*150	12.5	23.9	61.9	12.4	49.5	1595	0.352
						*170	14.5	20.6	71.8	14.4	57.5	1815	0.400
6	38	11.9	1368	28.0	48.0	42	2.5	93.3	14.6	2.92	11.7	537	0.119
						48	3	77.7	17.5	3.50	14.0	597	0.132
						55	3.5	66.6	20.4	4.09	16.3	657	0.145
						60	4	58.3	23.4	4.67	18.7	716	0.158
						65	4.5	51.8	26.3	5.25	21.0	776	0.171
						80	5.5	42.4	32.1	6.42	25.7	895	0.198
						90	6.5	35.9	38.0	7.59	30.4	1015	0.224
						100	7.5	31.1	43.8	8.76	35.0	1134	0.250
						115	8.5	27.4	49.6	9.93	39.7	1254	0.277
						140	10.5	22.2	61.3	12.3	49.0	1492	0.329
						*160	12.5	18.7	73.0	14.6	58.4	1731	0.382
						*180	14.5	16.1	84.7	16.9	67.7	1970	0.435
6	40	12.5	1299	30.0	50.0	45	2.5	80.0	16.2	3.23	12.9	566	0.125
						50	3	66.7	19.4	3.88	15.5	628	0.139
						55	3.5	57.1	22.6	4.53	18.1	691	0.152
						60	4	50.0	25.9	5.18	20.7	754	0.166
						70	4.5	44.4	29.1	5.82	23.3	817	0.180
						80	5.5	36.4	35.6	7.12	28.5	943	0.208
						95	6.5	30.8	42.1	8.41	33.6	1068	0.236
						105	7.5	26.7	48.5	9.70	38.8	1194	0.263
						120	8.5	23.5	55.0	11.0	44.0	1320	0.291
						140	10.5	19.0	67.9	13.6	54.3	1571	0.347

续表 2

mm

d	D	t	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
6	40	12.5	1299	30.0	50.0	*170	12.5	16.0	80.9	16.2	64.7	1822	0.402
						*190	14.5	13.8	93.8	18.8	75.0	2074	0.457
6	45	14.2	1155	35.0	55.0	48	2.5	56.2	20.5	4.09	16.4	636	0.140
						55	3	46.8	24.6	4.91	19.7	707	0.156
						60	3.5	40.1	28.7	5.73	22.9	778	0.172
						70	4	35.1	32.8	6.55	26.2	848	0.187
						75	4.5	31.2	36.8	7.37	29.5	919	0.203
						90	5.5	25.5	45.0	9.01	36.0	1060	0.234
						105	6.5	21.6	53.2	10.6	42.6	1202	0.265
						120	7.5	18.7	61.4	12.3	49.1	1343	0.296
						140	8.5	16.5	69.6	13.9	55.7	1485	0.327
						160	10.5	13.4	86.0	17.2	68.8	1767	0.390
						*190	12.5	11.2	102	20.5	81.9	2050	0.452
						*220	14.5	9.69	119	23.7	95.0	2333	0.515
6	50	16.2	1039	40.0	60.0	52	2.5	41.0	25.3	5.05	20.2	707	0.156
						60	3	34.1	30.3	6.07	24.3	786	0.173
						70	3.5	29.3	35.4	7.08	28.3	864	0.191
						75	4	25.6	40.4	8.09	32.3	943	0.208
						85	4.5	22.8	45.5	9.10	36.4	1021	0.225
						100	5.5	18.6	55.6	11.1	44.5	1178	0.260
						120	6.5	15.8	65.7	13.1	52.6	1335	0.295
						140	7.5	13.7	75.8	15.2	60.7	1492	0.329
						150	8.5	12.0	85.9	17.2	68.7	1650	0.364
						*190	10.5	9.75	106	21.2	84.9	1964	0.433
						*220	12.5	8.19	126	25.3	101	2278	0.502
						*260	14.5	7.06	147	29.3	117	2592	0.572
6	55	18.3	945	44.0	66.0	58	2.5	30.8	30.6	6.12	24.5	778	0.172
						70	3	25.6	36.7	7.34	29.4	864	0.191
						80	3.5	22.0	42.8	8.56	34.2	950	0.210
						90	4	19.2	48.9	9.79	39.1	1037	0.229
						95	4.5	17.1	55.0	11.0	44.0	1123	0.248
						115	5.5	14.0	67.3	13.5	53.8	1296	0.286
						130	6.5	11.8	79.5	15.9	63.6	1469	0.324
						150	7.5	10.3	91.7	18.3	73.4	1642	0.362
						170	8.5	9.05	104	20.8	83.2	1815	0.400
						200	10.5	7.33	128	25.7	103	2160	0.476
						*240	12.5	6.15	153	30.6	122	2506	0.553
						*280	14.5	5.31	177	35.5	142	2851	0.629
6	60	20.6	866	49.0	71.0	65	2.5	23.7	36.4	7.28	29.1	848	0.187
						75	3	19.8	43.7	8.73	34.9	943	0.208
						85	3.5	16.9	50.9	10.2	40.8	1037	0.229
						95	4	14.8	58.2	11.6	46.6	1131	0.249
						105	4.5	13.2	65.5	13.1	52.4	1225	0.270
						130	5.5	10.8	80.1	16.0	64.0	1414	0.312
						150	6.5	9.12	94.6	18.9	75.7	1602	0.353
						170	7.5	7.90	109	21.8	87.3	1791	0.395
						190	8.5	6.97	124	24.7	99.0	1979	0.437
						*240	10.5	5.64	153	30.6	122	2357	0.520
						*280	12.5	4.74	182	36.4	146	2734	0.603
						*320	14.5	4.09	211	42.2	169	3111	0.686
6	65	23.2	800	54.0	76.0	70	2.5	18.6	42.7	8.54	34.2	919	0.203
						85	3	15.5	51.3	10.3	41.0	1021	0.225



续表 2

mm

d	D	t	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
6	65	23.2	800	54.0	76.0	95	3.5	13.3	59.8	12.0	47.8	1123	0.248
						105	4	11.7	68.3	13.7	54.7	1225	0.270
						120	4.5	10.4	76.9	15.4	61.5	1327	0.293
						140	5.5	8.47	94.0	18.8	75.2	1532	0.338
						170	6.5	7.17	111	22.2	88.8	1736	0.383
						190	7.5	6.21	128	25.6	103	1940	0.428
						200	8.5	5.48	145	29.0	116	2144	0.473
						*260	10.5	4.44	179	35.9	144	2553	0.563
						*300	12.5	3.73	214	42.7	171	2961	0.653
						*360	14.5	3.21	248	49.5	198	3370	0.743
6	70	25.9	742	59.0	81.0	80	2.5	14.9	49.5	9.91	39.6	990	0.218
						90	3	12.4	59.4	11.9	47.6	1100	0.243
						105	3.5	10.7	69.3	13.9	55.5	1210	0.267
						115	4	9.33	79.3	15.9	63.4	1320	0.291
						130	4.5	8.29	89.2	17.8	71.3	1430	0.315
						160	5.5	6.78	109	21.8	87.2	1650	0.364
						180	6.5	5.74	129	25.8	103	1869	0.412
						200	7.5	4.97	149	29.7	119	2089	0.461
						240	8.5	4.39	168	33.7	135	2309	0.509
						*300	10.5	3.55	208	41.6	166	2749	0.606
8	32	11.0	3696	20.0	44.0	*340	12.5	2.98	248	49.5	198	3189	0.703
						*400	14.5	2.57	287	57.5	230	3629	0.800
						45	2.5	494	7.45	1.49	5.96	452	0.177
						50	3	411	8.93	1.79	7.15	503	0.197
						55	3.5	353	10.4	2.08	8.34	553	0.217
						60	4	309	11.9	2.38	9.53	603	0.237
						70	4.5	274	13.4	2.68	10.7	654	0.256
						75	5.5	224	16.4	3.28	13.1	754	0.296
						90	6.5	190	19.4	3.87	15.5	855	0.335
						100	7.5	165	22.3	4.47	17.9	955	0.375
8	35	11.6	3379	23.0	47.0	110	8.5	145	25.3	5.06	20.3	1056	0.414
						*150	10.5	118	31.3	6.25	25.0	1257	0.493
						*155	12.5	98.8	37.2	7.45	29.8	1458	0.572
						*180	14.5	85.1	43.2	8.64	34.5	1659	0.651
						45	2.5	377	8.91	1.78	7.13	495	0.194
						50	3	314	10.7	2.14	8.55	550	0.216
						58	3.5	270	12.5	2.49	9.98	605	0.237
						65	4	236	14.3	2.85	11.4	660	0.259
						70	4.5	210	16.0	3.21	12.8	715	0.280
						80	5.5	172	19.6	3.92	15.7	825	0.323
8	38	12.2	3112	26.0	50.0	90	6.5	145	23.2	4.63	18.5	935	0.367
						105	7.5	126	26.7	5.34	21.4	1045	0.410
						115	8.5	111	30.3	6.06	24.2	1155	0.453
						*140	10.5	89.8	37.4	7.48	29.9	1375	0.539
						*160	12.5	75.5	44.5	8.91	35.6	1595	0.625
						*180	14.5	65.1	51.7	10.3	41.3	1815	0.712
						48	2.5	295	10.5	2.10	8.40	537	0.211
						55	3	246	12.6	2.52	10.1	597	0.234
						58	3.5	211	14.7	2.94	11.8	657	0.257
						65	4	184	16.8	3.36	13.4	716	0.281
8	38	12.2	3112	26.0	50.0	70	4.5	164	18.9	3.78	15.1	776	0.304
						85	5.5	134	23.1	4.62	18.5	895	0.351

续表 2

mm

d	D	t	P <sub>s</sub> N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
8	38	12.2	3112	26	50	95	6.5	113	27.3	5.46	21.8	1015	0.398
						110	7.5	98.3	31.5	6.30	25.2	1134	0.445
						120	8.5	86.7	35.7	7.14	28.6	1254	0.492
						140	10.5	70.2	44.1	8.82	35.3	1492	0.585
						*170	12.5	59.0	52.5	10.5	42.0	1731	0.679
						*190	14.5	50.8	60.9	12.2	48.7	1970	0.772
8	40	12.7	2957	28.0	52.0	48	2.5	253	11.6	2.33	9.31	566	0.222
						55	3	211	14.0	2.79	11.2	628	0.246
						60	3.5	181	16.3	3.26	13.0	691	0.271
						65	4	158	18.6	3.72	14.9	754	0.296
						75	4.5	140	20.9	4.19	16.8	817	0.320
						85	5.5	115	25.6	5.12	20.5	943	0.370
						100	6.5	97.2	30.2	6.05	24.2	1068	0.419
						115	7.5	84.3	34.9	6.98	27.9	1194	0.468
						120	8.5	74.4	39.6	7.91	31.6	1320	0.517
						*150	10.5	60.2	48.9	9.77	39.1	1571	0.616
						*170	12.5	50.6	58.2	11.6	46.5	1822	0.715
						*200	14.5	43.6	67.5	13.5	54.0	2074	0.813
8	45	13.9	2628	33.0	57.0	50	2.5	178	14.7	2.94	11.8	636	0.249
						58	3	148	17.7	3.53	14.1	707	0.277
						65	3.5	127	20.6	4.12	16.5	778	0.305
						70	4	111	23.6	4.71	18.8	848	0.333
						80	4.5	98.6	26.5	5.30	21.2	919	0.360
						90	5.5	80.7	32.4	6.48	25.9	1060	0.416
						105	6.5	68.3	38.3	7.66	30.6	1202	0.471
						120	7.5	59.2	44.2	8.83	35.3	1343	0.527
						130	8.5	52.2	50.1	10.0	40.0	1485	0.582
						160	10.5	42.3	61.8	12.4	49.5	1767	0.693
						*190	12.5	35.5	73.6	14.7	58.9	2050	0.804
						*220	14.5	30.6	85.4	17.1	68.3	2333	0.915
8	50	15.3	2365	38.0	62.0	55	2.5	129	18.2	3.64	14.5	707	0.277
						60	3	108	21.8	4.36	17.5	786	0.308
						70	3.5	92.5	25.4	5.09	20.4	864	0.339
						80	4	80.9	29.1	5.82	23.3	943	0.370
						85	4.5	71.9	32.7	6.54	26.2	1021	0.400
						100	5.5	58.8	40.0	8.00	32.0	1178	0.462
						115	6.5	49.8	47.3	9.45	37.8	1335	0.524
						130	7.5	43.1	54.5	10.9	43.6	1492	0.585
						150	8.5	38.1	61.8	12.4	49.4	1650	0.647
						180	10.5	30.8	76.3	15.3	61.1	1964	0.770
						*200	12.5	25.9	90.9	18.2	72.7	2278	0.893
						*240	14.5	22.3	105	21.1	84.3	2592	1.02
8	55	16.8	2150	42.0	68.0	58	2.5	97.2	22.0	4.40	17.6	778	0.305
						65	3	81.0	26.4	5.28	21.1	864	0.339
						75	3.5	69.5	30.8	6.16	24.6	950	0.373
						85	4	60.8	35.2	7.04	28.2	1037	0.407
						90	4.5	54.0	39.6	7.92	31.7	1123	0.440
						110	5.5	44.2	48.4	9.68	38.7	1296	0.508
						130	6.5	37.4	57.2	11.4	45.7	1469	0.576
						140	7.5	32.4	66.0	13.2	52.8	1642	0.644
						160	8.5	28.6	74.8	15.0	59.8	1815	0.712
						190	10.5	23.2	92.4	18.5	73.9	2160	0.847

## 普通圆柱螺旋压缩弹簧

编号 Q81 — 1A

共 34 页

第 27 页

续表 2

mm

d	D	t	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
8	55	16.6	2150	42.0	68.0	*220	12.5	19.4	110	22.0	88.0	2506	0.983
						*260	14.5	16.8	128	25.5	102	2851	1.12
						60	2.5	74.9	26.2	5.24	20.9	848	0.333
						70	3	62.4	31.4	6.28	25.1	943	0.370
						80	3.5	53.5	36.6	7.33	29.3	1037	0.407
						90	4	46.8	41.9	8.38	33.5	1131	0.444
						100	4.5	41.6	47.1	9.42	37.7	1225	0.480
						120	5.5	34.0	57.6	11.5	46.1	1414	0.554
						140	6.5	28.8	68.1	13.6	54.4	1602	0.628
						150	7.5	25.0	78.5	15.7	62.8	1791	0.702
						170	8.5	22.0	89.0	17.8	71.2	1979	0.776
						220	10.5	17.8	110	22.0	87.9	2357	0.924
						*260	12.5	15.0	131	26.2	105	2734	1.07
						*280	14.5	12.9	152	30.4	121	3111	1.22
8	65	20.4	1819	52.0	78.0	65	2.5	58.9	30.7	6.14	24.6	919	0.360
						75	3	49.1	36.9	7.37	29.5	1021	0.400
						90	3.5	42.1	43.0	8.60	34.4	1123	0.440
						100	4	36.8	49.2	9.83	39.3	1225	0.480
						110	4.5	32.7	55.3	11.1	44.2	1327	0.521
						130	5.5	26.8	67.6	13.5	54.1	1532	0.601
						150	6.5	22.7	79.9	16.0	63.9	1736	0.681
						170	7.5	19.6	92.2	18.4	73.7	1940	0.761
						190	8.5	17.3	104	20.9	83.6	2144	0.841
						240	10.5	14.0	129	25.8	103	2553	1.00
						*280	12.5	11.8	154	30.7	123	2961	1.16
						*320	14.5	10.2	178	35.6	143	3370	1.32
8	70	22.4	1670	57.0	83.0	70	2.5	47.2	35.6	7.13	28.5	990	0.388
						85	3	39.3	42.8	8.55	34.2	1100	0.431
						95	3.5	33.7	49.9	9.98	39.9	1210	0.474
						105	4	29.5	57.0	11.4	45.6	1320	0.517
						115	4.5	26.2	64.1	12.8	51.3	1430	0.561
						140	5.5	21.4	78.4	15.7	62.7	1650	0.647
						160	6.5	18.1	92.6	18.5	74.1	1869	0.733
						190	7.5	15.7	107	21.4	85.5	2089	0.819
						200	8.5	13.9	121	24.2	96.9	2309	0.906
						*260	10.5	11.2	150	29.9	120	2749	1.08
						*300	12.5	9.43	178	35.6	143	3189	1.25
						*340	14.5	8.13	207	41.3	165	3629	1.42
8	75	24.4	1577	62.0	88.0	75	2.5	38.4	40.9	8.18	32.7	1060	0.416
						90	3	32.0	49.1	9.82	39.3	1178	0.462
						100	3.5	27.4	57.3	11.5	45.8	1296	0.508
						115	4	24.0	65.4	13.1	52.4	1414	0.554
						130	4.5	21.3	73.6	14.7	58.9	1532	0.601
						150	5.5	17.4	90.0	18.0	72.0	1767	0.693
						180	6.5	14.8	106	21.3	85.1	2003	0.785
						200	7.5	12.8	123	24.5	98.2	2239	0.878
						220	8.5	11.3	139	27.8	111	2474	0.970
						*280	10.5	9.13	172	34.4	137	2946	1.16
						*320	12.5	7.67	204	40.9	164	3417	1.34
						*380	14.5	6.61	237	47.4	190	3888	1.52
8	80	26.7	1478	67.0	95.0	80	2.5	31.6	46.5	9.31	37.2	1131	0.444
						95	3	26.3	55.8	11.2	44.7	1257	0.493

续表 2

mm

d	D	t	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
8	80	26.7	1478	67.0	93.0	110	3.5	22.6	65.1	13.0	52.1	1382	0.542
						120	4	19.8	74.5	14.9	59.6	1508	0.591
						140	4.5	17.6	83.8	16.8	67.0	1634	0.641
						170	5.5	14.4	102	20.5	81.9	1885	0.739
						190	6.5	12.2	121	24.2	96.8	2137	0.838
						220	7.5	10.5	140	27.9	112	2388	0.936
						260	8.5	9.29	158	31.6	127	2639	1.03
						*300	10.5	7.52	195	39.1	156	3142	1.23
						*360	12.5	6.32	233	46.5	186	3645	1.43
						*400	14.5	5.45	270	54.0	216	4147	1.63
8	85	29.1	1391	71.0	99.0	90	2.5	26.3	52.5	10.5	42.0	1202	0.471
						105	3	22.0	63.0	12.6	50.4	1335	0.524
						120	3.5	18.8	73.5	14.7	58.8	1469	0.576
						130	4	16.5	84.1	16.8	67.2	1602	0.628
						150	4.5	14.6	94.6	18.9	75.6	1736	0.681
						180	5.5	12.0	116	23.1	92.5	2003	0.785
						200	6.5	10.1	137	27.3	109	2270	0.890
						240	7.5	8.78	158	31.5	126	2537	0.995
						280	8.5	7.75	179	35.7	143	2804	1.10
						*320	10.5	6.27	221	44.1	177	3338	1.31
8	90	31.7	1314	76.0	104.0	*400	12.5	5.27	263	52.5	210	3873	1.52
						*450	14.5	4.54	305	60.9	244	4407	1.73
						95	2.5	22.2	58.9	11.8	47.1	1273	0.499
						115	3	18.5	70.7	14.1	56.5	1414	0.554
						130	3.5	15.9	82.5	16.5	66.0	1555	0.610
						150	4	13.9	94.2	18.8	75.4	1697	0.665
						160	4.5	12.3	106	21.2	84.8	1838	0.721
						190	5.5	10.1	130	25.9	104	2121	0.832
						220	6.5	8.54	153	30.6	122	2404	0.943
						260	7.5	7.40	177	35.3	141	2686	1.05
10	40	13.6	5534	26.0	54.0	300	8.5	6.53	200	40.0	160	2969	1.16
						*360	10.5	5.28	247	49.5	198	3535	1.39
						*420	12.5	4.44	294	58.9	236	4100	1.61
						*480	14.5	3.83	342	68.3	273	4666	1.83
						55	2.5	617	8.99	1.80	7.19	503	0.308
						60	3	514	10.8	2.16	8.63	566	0.347
						70	3.5	441	12.6	2.52	10.1	628	0.385
						75	4	386	14.4	2.88	11.5	691	0.424
						80	4.5	343	16.2	3.24	12.9	754	0.462
						95	5.5	281	19.8	3.95	15.8	880	0.539
10	45	14.6	4919	31.0	59.0	110	6.5	237	23.4	4.67	18.7	1005	0.616
						120	7.5	206	27.0	5.39	21.6	1131	0.693
						140	8.5	182	30.6	6.11	24.4	1257	0.770
						*160	10.5	147	37.8	7.55	30.2	1508	0.924
						*190	12.5	123	44.9	8.99	36.0	1760	1.08
						*220	14.5	106	52.1	10.4	41.7	2011	1.23
						55	2.5	433	11.4	2.28	9.10	566	0.347
						65	3	361	13.7	2.73	10.9	636	0.390
						70	3.5	310	15.9	3.19	12.7	707	0.433
						80	4	271	18.2	3.64	14.6	778	0.476
10	45	14.6	4919	31.0	59.0	85	4.5	241	20.5	4.10	16.4	848	0.520
						100	5.5	197	25.0	5.01	20.0	990	0.606

续表 2

mm

d	D	t	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	Fs	F <sub>1</sub>	F <sub>2</sub>	L	m kg
10	45	14.6	4419	31.0	59.0	115	6.5	167	29.6	5.92	23.7	1131	0.693
						130	7.5	144	34.1	6.83	27.3	1273	0.780
						140	8.5	127	38.7	7.74	30.9	1414	0.866
						*170	10.5	103	47.8	9.56	38.2	1697	1.04
						*200	12.5	86.7	56.9	11.4	45.5	1979	1.21
						*240	14.5	74.7	66.0	13.2	52.8	2262	1.39
10	50	15.6	4427	36.0	64.0	60	2.5	316	14.0	2.81	11.2	628	0.385
						65	3	263	16.9	3.37	13.5	707	0.433
						75	3.5	226	19.7	3.93	15.7	786	0.481
						80	4	198	22.5	4.49	18.0	864	0.529
						90	4.5	176	25.3	5.06	20.2	943	0.578
						105	5.5	144	30.9	6.18	24.7	1100	0.674
						120	6.5	122	36.5	7.30	29.2	1257	0.770
						140	7.5	105	42.1	8.43	33.7	1414	0.866
						150	8.5	92.9	47.8	9.55	38.2	1571	0.963
						*190	10.5	75.2	59.0	11.8	47.2	1885	1.16
						*220	12.5	63.2	70.2	14.0	56.2	2199	1.35
10	55	16.8	4025	40.0	70.0	*260	14.5	54.5	81.5	16.3	65.2	2514	1.54
						60	2.5	237	17.0	3.40	13.6	691	0.424
						70	3	198	20.4	4.08	16.3	778	0.476
						80	3.5	170	23.8	4.76	19.0	864	0.529
						90	4	148	27.2	5.44	21.8	950	0.582
						95	4.5	132	30.6	6.12	24.5	1037	0.635
						115	5.5	108	37.4	7.48	29.9	1210	0.741
						130	6.5	91.3	44.2	8.84	35.3	1382	0.847
						150	7.5	79.1	51.0	10.2	40.8	1555	0.953
						170	8.5	69.8	57.8	11.6	46.2	1728	1.06
						200	10.5	56.5	71.4	14.3	57.1	2074	1.27
						*240	12.5	47.5	85.0	17.0	68.0	2419	1.48
						*280	14.5	40.9	98.6	19.7	78.9	2765	1.69
10	60	18.1	3691	45.0	75.0	65	2.5	183	20.2	4.04	16.2	754	0.462
						75	3	152	24.3	4.85	19.4	848	0.520
						85	3.5	131	28.3	5.66	22.7	943	0.578
						95	4	114	32.4	6.47	25.9	1037	0.635
						105	4.5	102	36.4	7.28	29.1	1131	0.693
						120	5.5	83.1	44.5	8.90	35.6	1320	0.809
						140	6.5	70.3	52.6	10.5	42.1	1508	0.924
						160	7.5	61.0	60.7	12.1	48.5	1697	1.04
						180	8.5	53.8	68.8	13.8	55.0	1885	1.16
						200	10.5	43.5	84.9	17.0	68.0	2262	1.39
						*260	12.5	36.6	101	20.2	80.9	2639	1.62
10	65	19.5	3406	50.0	80.0	*280	14.5	31.5	117	23.5	93.8	3016	1.85
						70	2.5	144	23.7	4.75	19.0	817	0.501
						80	3	120	28.5	5.70	22.8	919	0.563
						90	3.5	103	33.2	6.65	26.6	1021	0.626
						100	4	89.9	38.0	7.60	30.4	1123	0.688
						110	4.5	79.9	42.7	8.54	34.2	1225	0.751
						130	5.5	65.4	52.2	10.4	41.8	1430	0.876
						150	6.5	55.3	61.7	12.3	49.4	1634	1.00
						170	7.5	47.9	71.2	14.2	57.0	1838	1.13
						190	8.5	42.3	80.7	16.1	64.6	2042	1.25
						220	10.5	34.2	99.7	19.9	79.8	2451	1.50

续表 2

mm

d	D	t	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
10	65	19.5	3406	50.0	60.0	*260	12.5	28.8	119	23.7	94.9	2859	1.75
						*300	14.5	24.8	138	27.5	110	3268	2.00
10	70	21.0	3162	55.0	85.0	75	2.5	115	27.5	5.51	22.0	880	0.539
						85	3	96.0	33.0	6.61	26.4	990	0.606
						95	3.5	82.3	38.5	7.71	30.8	1100	0.674
						105	4	72.0	44.0	8.81	35.2	1210	0.741
						115	4.5	64.0	49.5	9.91	39.6	1320	0.809
						140	5.5	52.3	60.6	12.1	48.4	1540	0.943
						160	6.5	44.3	71.6	14.3	57.3	1760	1.08
						180	7.5	38.4	82.6	16.5	66.1	1979	1.21
						200	8.5	33.9	93.6	18.7	74.9	2199	1.35
						240	10.5	27.4	116	23.1	92.5	2639	1.62
						*280	12.5	23.0	138	27.5	110	3079	1.89
						*320	14.5	19.9	160	31.9	128	3519	2.16
10	75	22.6	2952	60.0	90.0	80	2.5	93.6	31.6	6.32	25.3	943	0.578
						90	3	78.0	37.9	7.58	30.3	1060	0.650
						100	3.5	66.9	44.2	8.85	35.4	1178	0.722
						110	4	58.5	50.6	10.1	40.4	1296	0.794
						120	4.5	52.0	56.9	11.4	45.5	1414	0.866
						140	5.5	42.6	69.5	13.9	55.6	1650	1.01
						170	6.5	36.0	82.2	16.4	65.7	1885	1.16
						190	7.5	31.2	94.8	19.0	75.8	2121	1.30
						220	8.5	27.5	107	21.5	86.0	2357	1.44
						260	10.5	22.3	133	26.5	106	2828	1.73
						*300	12.5	18.7	158	31.6	126	3299	2.02
						*360	14.5	16.1	183	36.7	147	3770	2.31
10	80	24.4	2767	65.0	95.0	80	2.5	77.1	36.0	7.19	28.8	1005	0.616
						95	3	64.3	43.1	8.63	34.5	1131	0.693
						105	3.5	55.1	50.3	10.1	40.3	1257	0.770
						115	4	48.2	57.5	11.5	46.0	1382	0.847
						130	4.5	42.9	64.7	12.9	51.8	1508	0.924
						150	5.5	35.1	79.1	15.8	63.3	1760	1.08
						180	6.5	29.7	93.5	18.7	74.8	2011	1.23
						200	7.5	25.7	108	21.6	86.3	2262	1.39
						240	8.5	22.7	122	24.4	97.8	2514	1.54
						280	10.5	18.4	151	30.2	121	3016	1.85
						*340	12.5	15.4	180	36.0	144	3519	2.16
						*380	14.5	13.3	209	41.7	167	4022	2.46
10	85	26.2	2604	69.0	161.0	90	2.5	64.3	40.6	8.12	32.5	1068	0.655
						100	3	53.6	48.7	9.74	39.0	1202	0.736
						115	3.5	45.9	56.8	11.4	45.5	1335	0.818
						130	4	40.2	64.9	13.0	52.0	1469	0.900
						140	4.5	35.7	73.1	14.6	58.4	1602	0.982
						160	5.5	29.2	89.3	17.9	71.4	1869	1.15
						190	6.5	24.7	106	21.1	84.4	2137	1.31
						220	7.5	21.4	122	24.4	97.4	2404	1.47
						240	8.5	18.9	138	27.6	110	2671	1.64
						300	10.5	15.3	170	34.1	136	3205	1.96
						*360	12.5	12.9	203	40.6	162	3739	2.29
						*400	14.5	11.1	235	47.1	188	4273	2.62
10	90	28.2	2460	74.0	106.0	90	2.5	54.2	45.5	9.10	36.4	1131	0.693
						105	3	45.2	54.6	10.9	43.7	1273	0.780

续表 2

mm

d	D	t	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
10	90	28.2	2460	74.0	106.0	120	3.5	38.7	63.7	12.7	51.0	1414	0.866
						130	4	33.9	72.8	14.6	58.2	1555	0.953
						150	4.5	30.1	81.9	16.4	65.5	1697	1.04
						170	5.5	24.6	100	20.0	80.1	1979	1.21
						200	6.5	20.8	118	23.7	94.6	2262	1.39
						240	7.5	18.1	137	27.3	109	2545	1.56
						260	8.5	15.9	155	30.9	124	2828	1.73
						320	10.5	12.9	191	38.2	153	3393	2.08
						380	12.5	10.8	228	45.5	182	3959	2.43
						450	14.5	9.34	264	52.8	211	4524	2.77
10	95	30.2	2330	79.0	111.0	95	2.5	46.1	50.7	10.1	40.6	1194	0.732
						110	3	38.4	60.8	12.2	48.7	1343	0.823
						130	3.5	32.9	71.0	14.2	56.8	1492	0.914
						140	4	28.8	81.1	16.2	64.9	1642	1.01
						160	4.5	25.6	91.3	18.3	73.0	1791	1.10
						190	5.5	20.9	112	22.3	89.2	2089	1.28
						220	6.5	17.7	132	26.4	105	2388	1.46
						260	7.5	15.4	152	30.4	122	2686	1.65
						280	8.5	13.6	172	34.5	138	2985	1.83
						340	10.5	11.0	213	42.6	170	3582	2.19
						*400	12.5	9.21	254	50.7	203	4179	2.56
						*480	14.5	7.94	294	58.8	235	4776	2.93
10	100	32.4	2214	84.0	116.0	100	2.5	39.5	56.2	11.2	44.9	1257	0.770
						120	3	32.9	67.4	13.5	53.9	1414	0.866
						140	3.5	28.2	78.6	15.7	62.9	1571	0.963
						150	4	24.7	89.9	18.0	71.9	1728	1.06
						170	4.5	21.9	101	20.2	80.9	1885	1.16
						200	5.5	18.0	124	24.7	98.9	2199	1.35
						240	6.5	15.2	146	29.2	117	2514	1.54
						260	7.5	13.2	169	33.7	135	2828	1.73
						300	8.5	11.6	191	38.2	153	3142	1.93
						360	10.5	9.40	236	47.2	189	3770	2.31
						*420	12.5	7.90	281	56.2	225	4399	2.70
						*500	14.5	6.81	326	65.2	261	5027	3.08
12	50	18.2	10038	34.0	66.0	70	2.5	647	15.5	3.11	12.4	628	0.554
						80	3	539	18.6	3.73	14.9	707	0.624
						90	3.5	462	21.7	4.35	17.4	786	0.693
						95	4	404	24.8	4.97	19.9	864	0.762
						105	4.5	359	27.9	5.59	22.4	943	0.832
						120	5.5	294	34.2	6.83	27.3	1100	0.970
						140	6.5	249	40.4	8.07	32.3	1257	1.11
						160	7.5	216	46.6	9.32	37.3	1414	1.25
						180	8.5	190	52.8	10.6	42.2	1571	1.39
						*220	10.5	154	65.2	13.0	52.2	1885	1.66
						*260	12.5	129	77.6	15.5	62.1	2199	1.94
						*280	14.5	112	90.0	18.0	72.0	2514	2.22
12	55	19.5	9125	38.0	72.0	75	2.5	486	18.8	3.76	15.0	691	0.610
						85	3	405	22.5	4.51	18.0	778	0.686
						90	3.5	347	26.3	5.26	21.0	864	0.762
						100	4	304	30.1	6.01	24.0	950	0.839
						110	4.5	270	33.8	6.76	27.1	1037	0.915
						130	5.5	221	41.3	8.27	33.1	1210	1.07

续表 2

mm

d	D	t	Ps N	D <sub>max</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
12	55	19.5	9125	38.0	72.0	150	6.5	187	48.8	9.77	39.1	1382	1.22
						170	7.5	162	56.4	11.3	45.1	1555	1.37
						190	8.5	143	63.9	12.8	51.1	1728	1.52
						*220	10.5	116	78.9	15.8	63.1	2074	1.83
						*260	12.5	97.2	93.9	18.8	75.1	2419	2.13
						*300	14.5	83.8	109	21.8	87.2	2765	2.44
12	60	20.9	8365	43.0	77.0	75	2.5	374	22.4	4.47	17.9	754	0.665
						85	3	312	26.8	5.37	21.5	848	0.748
						95	3.5	267	31.3	6.26	25.0	943	0.832
						105	4	234	35.8	7.15	28.6	1037	0.915
						120	4.5	208	40.2	8.05	32.2	1131	0.998
						140	5.5	170	49.2	9.84	39.3	1320	1.16
						160	6.5	144	58.1	11.6	46.5	1508	1.33
						180	7.5	125	67.1	13.4	53.7	1697	1.50
						200	8.5	110	76.0	15.2	60.8	1885	1.66
						*240	10.5	89.1	93.9	18.8	75.1	2262	2.00
						*280	12.5	74.9	112	22.4	89.4	2639	2.33
12	65	22.5	7722	48.0	82.0	*320	14.5	64.6	130	25.9	104	3016	2.66
						80	2.5	294	26.2	5.25	21.0	817	0.721
						90	3	245	31.5	6.30	25.2	919	0.811
						105	3.5	210	36.7	7.35	29.4	1021	0.901
						115	4	184	42.0	8.40	33.6	1123	0.991
						130	4.5	164	47.2	9.45	37.8	1225	1.08
						150	5.5	134	57.7	11.5	46.2	1430	1.26
						170	6.5	113	68.2	13.6	54.6	1634	1.44
						190	7.5	98.2	78.7	15.7	63.0	1838	1.62
						220	8.5	86.6	89.2	17.8	71.4	2042	1.80
						*260	10.5	70.1	110	22.0	88.2	2451	2.16
						*300	12.5	58.9	131	26.2	105	2859	2.52
						*340	14.5	50.8	152	30.4	122	3268	2.88
12	70	24.2	7170	53.0	87.0	85	2.5	236	30.4	6.09	24.3	880	0.776
						95	3	196	36.5	7.30	29.2	990	0.873
						110	3.5	168	42.6	8.52	34.1	1100	0.970
						120	4	147	48.7	9.74	39.0	1210	1.07
						130	4.5	131	54.8	11.0	43.8	1320	1.16
						150	5.5	107	66.9	13.4	53.6	1540	1.36
						180	6.5	90.7	79.1	15.8	63.3	1760	1.55
						200	7.5	78.6	91.3	18.3	73.0	1979	1.75
						220	8.5	69.3	103	20.7	82.8	2199	1.94
						*280	10.5	56.1	128	25.6	102	2639	2.33
						*320	12.5	47.2	152	30.4	122	3079	2.72
						*380	14.5	40.7	176	35.3	141	3519	3.10
12	75	26.0	6692	58.0	92.0	90	2.5	192	34.9	6.99	27.9	943	0.832
						100	3	160	41.9	8.38	33.5	1060	0.936
						115	3.5	137	48.9	9.78	39.1	1178	1.04
						130	4	120	55.9	11.2	44.7	1296	1.14
						140	4.5	106	62.9	12.6	50.3	1414	1.25
						170	5.5	87.1	76.9	15.4	61.5	1650	1.46
						190	6.5	73.7	90.8	18.2	72.7	1885	1.66
						220	7.5	63.9	105	21.0	83.8	2121	1.87
						240	8.5	56.4	119	23.8	95.0	2357	2.08
						*300	10.5	45.6	147	29.3	117	2828	2.49



## 普通圆柱螺旋压缩弹簧

编号 Q81 — 1A

共 34 页

第 33 页

续表 2

mm

d	D	t	Ps N	D <sub>max</sub>	D <sub>min</sub>	H <sub>0</sub>	n 圈	P' N/mm	Fs	F <sub>1</sub>	F <sub>2</sub>	L	m kg
12	75	26.0	6692	58.0	92.0	*340	12.5	38.3	175	34.9	140	3299	2.91
						*400	14.5	33.1	203	40.5	162	3770	3.33
12	80	27.9	6274	63.0	97.0	95	2.5	158	39.7	7.95	31.8	1005	0.887
						105	3	132	47.7	9.54	38.2	1131	0.998
						120	3.5	113	55.6	11.1	44.5	1257	1.11
						140	4	98.7	63.6	12.7	50.9	1382	1.22
						150	4.5	87.8	71.5	14.3	57.2	1508	1.33
						180	5.5	71.8	87.4	17.5	70.0	1760	1.55
						200	6.5	60.8	103	20.7	82.7	2011	1.77
						240	7.5	52.7	119	23.8	95.4	2262	2.00
						260	8.5	46.5	135	27.0	108	2514	2.22
						*320	10.5	37.6	167	33.4	134	3016	2.66
						*380	12.5	31.6	199	39.7	159	3519	3.10
						*420	14.5	27.2	231	46.1	184	4022	3.55
12	85	29.9	5905	67.0	103.0	100	2.5	132	44.9	8.97	35.9	1068	0.943
						115	3	110	53.8	10.8	43.1	1202	1.06
						130	3.5	94.1	62.8	12.6	50.3	1335	1.18
						140	4	82.3	71.8	14.4	57.4	1469	1.30
						160	4.5	73.2	80.8	16.2	64.6	1602	1.41
						190	5.5	59.9	98.7	19.7	79.0	1869	1.65
						220	6.5	50.6	117	23.3	93.3	2137	1.89
						240	7.5	43.9	135	26.9	108	2404	2.12
						280	8.5	38.7	153	30.5	122	2671	2.36
						*340	10.5	31.4	188	37.7	151	3205	2.83
						*400	12.5	26.3	224	44.9	179	3739	3.30
						*450	14.5	22.7	260	52.0	208	4273	3.77
12	90	32.1	5577	72.0	108.0	105	2.5	111	50.3	10.1	40.2	1131	0.998
						120	3	92.4	60.4	12.1	48.3	1273	1.12
						140	3.5	79.2	70.4	14.1	56.3	1414	1.25
						150	4	69.3	80.5	16.1	64.4	1555	1.37
						170	4.5	61.6	90.5	18.1	72.4	1697	1.50
						200	5.5	50.4	111	22.1	88.5	1979	1.75
						240	6.5	42.7	131	26.2	105	2262	2.00
						260	7.5	37.0	151	30.2	121	2545	2.25
						300	8.5	32.6	171	34.2	137	2828	2.49
						*360	10.5	26.4	211	42.3	169	3393	2.99
						*420	12.5	22.2	252	50.3	201	3959	3.49
						*480	14.5	19.1	292	58.4	233	4524	3.99
12	95	34.4	5283	77.0	113.0	110	2.5	94.3	56.0	11.2	44.8	1194	1.05
						130	3	78.6	67.3	13.5	53.8	1343	1.19
						140	3.5	67.4	78.5	15.7	62.8	1492	1.32
						160	4	59.0	89.7	17.9	71.7	1642	1.45
						180	4.5	52.4	101	20.2	80.7	1791	1.58
						220	5.5	42.9	123	24.7	98.6	2089	1.84
						240	6.5	36.3	146	29.1	117	2388	2.11
						280	7.5	31.4	168	33.6	135	2686	2.37
						320	8.5	27.7	191	38.1	152	2985	2.63
						*380	10.5	22.5	235	47.1	188	3582	3.16
						*450	12.5	18.9	280	56.0	224	4179	3.69
						*520	14.5	16.3	325	65.0	260	4776	4.21
12	100	36.8	5019	82.0	118.0	115	2.5	80.9	62.1	12.4	49.7	1257	1.11
						130	3	67.4	74.5	14.9	59.6	1414	1.25

续表 2

mm

d	D	t	Ps N	D <sub>xmax</sub>	D <sub>Tmin</sub>	H <sub>0</sub>	n 圈	P' N/mm	F <sub>s</sub>	F <sub>1</sub>	F <sub>2</sub>	L	m kg
12	100	36.8	5019	82.0	118.0	150	3.5	57.8	86.9	17.4	69.6	1571	1.39
						170	4	50.5	99.4	19.9	79.5	1728	1.52
						190	4.5	44.9	112	22.4	89.4	1885	1.66
						220	5.5	36.8	137	27.3	109	2199	1.94
						260	6.5	31.1	161	32.3	129	2514	2.22
						300	7.5	27.0	186	37.3	149	2828	2.49
						340	8.5	23.8	211	42.2	169	3142	2.77
						*420	10.5	19.3	261	52.2	209	3770	3.33
						*480	12.5	16.2	311	62.1	248	4399	3.88
12	110	42.0	4563	92.0	128.0	*550	14.5	13.9	360	72.0	288	5027	4.44
						130	2.5	60.8	75.1	15.0	60.1	1382	1.22
						150	3	50.6	90.2	18.0	72.1	1555	1.37
						170	3.5	43.4	105	21.0	84.2	1728	1.52
						190	4	38.0	120	24.0	96.2	1901	1.68
						220	4.5	33.8	135	27.1	108	2074	1.83
						260	5.5	27.6	165	33.1	132	2419	2.13
						300	6.5	23.4	195	39.1	156	2765	2.44
						340	7.5	20.3	225	45.1	180	3111	2.74
						380	8.5	17.9	255	51.1	204	3456	3.05
						*480	10.5	14.5	316	63.1	252	4147	3.66
12	120	47.7	4182	102.0	138.0	*550	12.5	12.2	376	75.1	301	4839	4.27
						*650	14.5	10.5	436	87.2	349	5530	4.88
						140	2.5	46.8	89.4	17.9	71.5	1508	1.33
						170	3	39.0	107	21.5	85.8	1697	1.50
						190	3.5	33.4	125	25.0	100	1885	1.66
						220	4	29.3	143	28.6	114	2074	1.83
						240	4.5	26.0	161	32.2	129	2262	2.00
						290	5.5	21.3	197	39.3	157	2639	2.33
						340	6.5	18.0	233	46.5	186	3016	2.66
						380	7.5	15.6	268	53.7	215	3393	2.99
						*450	8.5	13.8	304	60.8	243	3770	3.33
						*520	10.5	11.1	376	75.1	300	4524	3.99
						*620	12.5	9.36	447	89.4	358	5279	4.66
						*720	14.5	8.07	519	104	415	6033	5.32

89

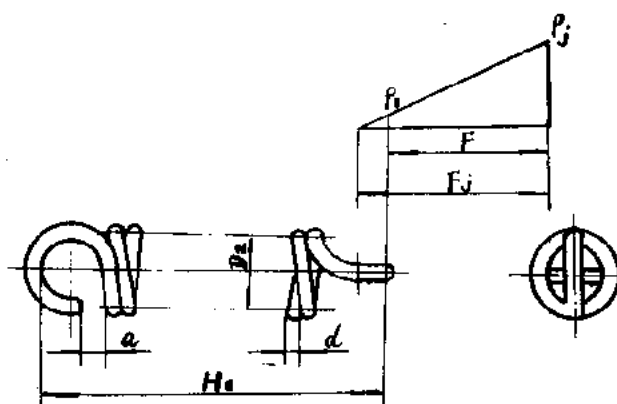
济 南	工 厂 标 准	编 号	Q81-3A
第 二 机 床 厂	普 通 圆 柱 螺 旋 拉 伸 弹 簧	代 替	
		共 26 页	第 1 页

本标准适用于受变负荷作用次数在 $10^3$ 次以下的以及受变负荷作用次数在 $10^3 \sim 10^6$ 次或冲击负荷的普通圆柱螺旋圆钩环型拉伸弹簧。

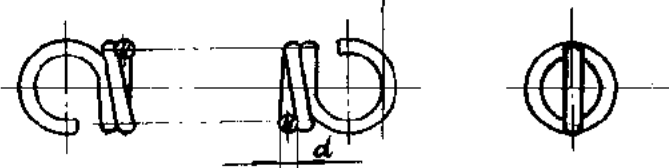
材料：碳素弹簧钢丝C级

热处理：回火

A 型  
(n 尾数为 0.25)



B 型  
(n 尾数为 0.5)



A型  $d=2.5$   $D_2=12$   $H_0=70.9$  标记  $2.5 \times 12 \times 70.9$  Q81-3A

B型  $d=2.5$   $D_2=12$   $H_0=70.9$  B- $2.5 \times 12 \times 70.9$  Q81-3A

表 1

参 数 名 称	代号	单位	参 数 名 称	代号	单位
材 料 直 径	d	mm	工作极限负荷下的变形量	$F_J$	mm
弹 簧 中 径	$D_2$		工作极限负荷下的实际变形量	F	
弹 簧 外 径	D		工作极限剪切应力	$\tau_J$	N/mm <sup>2</sup>
自 由 长 度	$H_0$		初 拉 力	$P_0$	N
工作极限负荷下的长度	$H_J$		展 开 长 度	L	mm
有 效 圈 数	n	圈	弹 簧 单 件 重 量	Q	kg
弹 簧 刚 度	$P'$	N/mm	钩 环 开 口 宽 度	a	mm
工 作 极 限 负 荷	$P_J$	N			

会 签

根 据	拟 制	批 准	实 施 日 期
GB4142-84	标准化组长	II	II
	科 长	84.7	1998.6

表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
1	5	9.243	48.19	8.25	16.7	9.58	5.03	148	0.909
				8.5		9.29	5.19	152	0.933
				10.25	18.7	7.71	6.25	180	1.10
				10.5		7.52	6.41	184	1.13
				12.25	20.7	6.45	7.47	211	1.29
				12.5		6.32	7.63	215	1.32
				15.25	23.7	5.18	9.30	258	1.58
				15.5		5.10	9.46	262	1.61
				18.25	26.7	4.33	11.1	306	1.87
				18.5		4.27	11.3	309	1.90
				20.25	28.7	3.90	12.4	337	2.06
				20.5		3.85	12.5	341	2.09
				25.25	33.7	3.13	15.4	415	2.55
				25.5		3.10	15.6	419	2.57
				30.25	38.7	2.61	18.5	494	3.03
				30.5		2.59	18.6	498	3.05
				35.25	43.7	2.24	21.5	573	3.51
				35.5		2.23	21.7	576	3.53
				40.25	48.7	1.96	24.6	651	3.99
				40.5		1.95	24.7	655	4.01
1	6	6.418	42.02	45.25	53.7	1.75	27.6	730	4.47
				45.5		1.74	27.8	734	4.49
				8.25	18.7	5.54	7.58	178	1.09
				8.5		5.38	7.81	183	1.12
				10.25	20.7	4.46	9.42	216	1.32
				10.5		4.35	9.65	221	1.35
				12.25	22.7	3.73	11.3	254	1.55
				12.5		3.66	11.5	258	1.58
				15.25	25.7	3.00	14.0	310	1.90
				15.5		2.95	14.2	315	1.93
				18.25	28.7	2.51	16.8	367	2.25
				18.5		2.47	17.0	371	2.27
				20.25	30.7	2.26	18.6	404	2.48
				20.5		2.23	18.8	409	2.51
				25.25	35.7	1.81	23.2	499	3.05
				25.5		1.79	23.4	503	3.08
				30.25	40.7	1.51	27.8	593	3.63
				30.5		1.50	28.0	598	3.66
				35.25	45.7	1.30	32.4	687	4.21
				35.5		1.29	32.6	692	4.24
1	7	4.716	37.20	40.25	50.7	1.14	37.0	781	4.79
				40.5		1.13	37.2	786	4.82
				45.25	55.7	1.01	41.6	876	5.36
				45.5		1.00	41.8	880	5.39
				8.25	20.7	3.49	10.7	208	1.27
				8.5		3.39	11.0	213	1.31
				10.25	22.7	2.81	13.2	252	1.54
				10.5		2.74	13.6	257	1.58
1	7	4.716	37.20	12.25	24.7	2.35	15.8	296	1.81
				12.5		2.30	16.1	301	1.85
				15.25	27.7	1.89	19.7	362	2.22
				15.5		1.86	20.0	367	2.25

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
1	7	4.716	37.20	18.25	30.7	1.58	23.6	428	2.62
				18.5		1.56	23.9	433	2.65
				20.25	32.7	1.42	26.2	472	2.89
				20.5		1.40	26.5	477	2.92
				25.25	37.7	1.14	32.6	582	3.56
				25.5		1.13	32.9	587	3.60
				30.25	42.7	0.952	39.1	692	4.24
				30.5		0.944	39.4	697	4.27
				35.25	47.7	0.817	45.5	802	4.91
				35.5		0.811	45.9	807	4.94
				40.25	52.7	0.715	52.0	912	5.58
				40.5		0.711	52.3	917	5.62
				45.25	57.7	0.636	58.5	1021	6.26
				45.5		0.633	58.8	1027	6.29
1	8	3.610	33.34	8.25	22.7	2.34	14.3	238	1.45
				8.5		2.27	14.7	244	1.49
				10.25	24.7	1.88	17.7	288	1.76
				10.5		1.84	18.1	294	1.80
				12.25	26.7	1.57	21.2	338	2.07
				12.5		1.54	21.6	344	2.11
				15.25	29.7	1.26	26.4	413	2.53
				15.5		1.24	26.8	420	2.57
				18.25	32.7	1.06	31.5	489	2.99
				18.5		1.04	32.0	495	3.03
				20.25	34.7	0.952	35.0	539	3.30
				20.5		0.941	35.4	545	3.34
				25.25	39.7	0.764	43.6	665	4.07
				25.5		0.756	44.1	671	4.11
				30.25	44.7	0.638	52.3	790	4.84
				30.5		0.632	52.7	797	4.88
				35.25	49.7	0.547	60.9	916	5.61
				35.5		0.543	61.4	922	5.65
				40.25	54.7	0.479	69.6	1042	6.38
				40.5		0.476	70.0	1048	6.42
1	9	2.853	30.19	45.25	59.7	0.426	78.2	1167	7.15
				45.5		0.424	78.6	1174	7.19
				8.25	24.7	1.64	18.4	267	1.64
				8.5		1.59	18.9	274	1.68
				10.25	26.7	1.32	22.8	324	1.98
				10.5		1.29	23.4	331	2.03
				12.25	28.7	1.11	27.3	380	2.33
				12.5		1.08	27.9	387	2.37
				15.25	31.7	0.888	34.0	465	2.85
				15.5		0.874	34.5	472	2.89
				18.25	34.7	0.742	40.7	550	3.37
				18.5		0.732	41.2	557	3.41
				20.25	36.7	0.669	45.1	606	3.72
				20.5		0.661	45.7	614	3.76
				25.25	41.7	0.536	56.3	748	4.58
				25.5		0.531	56.8	755	4.62
				30.25	46.7	0.448	67.4	889	5.45
				30.5		0.444	68.0	896	5.49
				35.25	51.7	0.384	78.6	1031	6.31

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
1	9	2.853	30.19	35.5	51.7	0.382	79.1	1038	6.36
				40.25	56.7	0.337	89.7	1172	7.18
				40.5		0.334	90.3	1179	7.22
				45.25	61.7	0.299	101	1313	8.05
				45.5		0.298	101	1320	8.09
				8.25	26.7	1.20	23.0	297	1.82
				8.5		1.16	23.7	305	1.87
				10.25	28.7	0.963	28.6	360	2.20
				10.5		0.940	29.3	368	2.25
				12.25	30.7	0.806	34.2	423	2.59
				12.5		0.790	34.9	430	2.64
				15.25	33.7	0.648	42.6	517	3.17
				15.5		0.637	43.3	525	3.21
				18.25	36.7	0.541	51.0	611	3.74
1	10	2.311	27.58	18.5		0.534	51.7	619	3.79
				20.25	38.7	0.488	56.6	674	4.13
				20.5		0.482	57.3	682	4.18
				25.25	43.7	0.391	70.5	831	5.09
				25.5		0.387	71.2	839	5.14
				30.25	48.7	0.326	84.5	988	6.05
				30.5		0.324	85.2	996	6.10
				35.25	53.7	0.280	98.5	1145	7.02
				35.5		0.278	99.2	1153	7.06
				40.25	58.7	0.245	112	1302	7.98
				40.5		0.244	113	1310	8.03
				45.25	63.7	0.218	126	1459	8.94
				45.5		0.217	127	1467	8.99
1	12	1.605	23.51	8.25	30.7	0.693	33.9	356	2.18
				8.5		0.672	35.0	366	2.24
				10.25	32.7	0.558	42.2	432	2.64
				10.5		0.544	43.2	441	2.70
				12.25	34.7	0.467	50.4	507	3.11
				12.5		0.457	51.4	516	3.16
				15.25	37.7	0.375	62.7	620	3.80
				15.5		0.369	63.8	630	3.86
				18.25	40.7	0.313	75.1	733	4.49
				18.5		0.309	76.1	743	4.55
				20.25	42.7	0.282	83.3	809	4.95
				20.5		0.279	84.3	818	5.01
				25.25	47.7	0.226	104	997	6.11
				25.5		0.224	105	1007	6.17
				30.25	52.7	0.189	124	1186	7.26
				30.5		0.187	125	1195	7.32
				35.25	57.7	0.162	145	1374	8.42
				35.5		0.161	146	1384	8.48
				40.25	62.7	0.142	166	1563	9.57
				40.5		0.141	167	1572	9.63
				45.25	67.7	0.126	186	1751	10.7
				45.5		0.126	187	1761	10.8
1.2	8	7.486	52.98	8.25	24.1	4.85	10.9	238	2.10
				8.5		4.71	11.3	244	2.15
				10.25	26.5	3.90	13.6	288	2.54
				10.5		3.81	13.9	294	2.59

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
1.2	8	7.486	52.98	12.25	28.9	3.26	16.2	338	2.98
				12.5		3.20	16.6	344	3.04
				15.25	32.5	2.62	20.2	413	3.65
				15.5		2.58	20.5	420	3.70
				18.25	36.1	2.19	24.2	489	4.31
				18.5		2.16	24.5	495	4.37
				20.25	38.5	1.98	26.8	539	4.76
				20.5		1.95	27.2	545	4.81
				25.25	44.5	1.58	33.5	665	5.86
				25.5		1.57	33.8	671	5.92
				30.25	50.5	1.32	40.1	790	6.97
				30.5		1.31	40.4	797	7.03
				35.25	56.5	1.13	46.7	916	8.08
				35.5		1.13	47.0	922	8.14
				40.25	62.5	0.994	53.3	1042	9.19
				40.5		0.988	53.7	1048	9.25
				45.25	68.5	0.884	59.9	1167	10.3
				45.5		0.879	60.3	1174	10.4
1.2	10	4.791	44.14	8.25	28.1	2.48	17.8	297	2.62
				8.5		2.41	18.3	305	2.69
				10.25	30.5	2.00	22.1	360	3.17
				10.5		1.95	22.6	368	3.24
				12.25	32.9	1.67	26.4	423	3.73
				12.5		1.64	26.9	430	3.80
				15.25	36.5	1.34	32.9	517	4.56
				15.5		1.32	33.4	525	4.63
				18.25	40.1	1.12	39.3	611	5.39
				18.5		1.11	39.9	619	5.46
				20.25	42.5	1.01	43.6	674	5.94
				20.5		0.999	44.2	682	6.01
				25.25	48.5	0.811	54.4	831	7.33
				25.5		0.803	55.0	839	7.40
				30.25	54.5	0.677	65.2	988	8.72
				30.5		0.671	65.7	996	8.79
				35.25	60.5	0.581	76.0	1145	10.1
				35.5		0.577	76.5	1153	10.2
				40.25	66.5	0.509	86.8	1302	11.5
				40.5		0.506	87.3	1310	11.6
1.2	12	3.327	37.78	45.25	72.5	0.453	97.5	1459	12.9
				45.5		0.450	98.1	1467	12.9
				8.25	32.1	1.44	26.3	356	3.14
				8.5		1.39	27.1	366	3.23
				10.25	34.5	1.16	32.7	432	3.81
				10.5		1.13	33.5	441	3.89
				12.25	36.9	0.967	39.1	507	4.47
				12.5		0.948	39.9	516	4.56
				15.25	40.5	0.777	48.6	620	5.47
				15.5		0.765	49.4	630	5.55
				18.25	44.1	0.649	58.2	733	6.47
				18.5		0.641	59.0	743	6.55
				20.25	46.5	0.585	64.6	809	7.13
				20.5		0.578	65.4	818	7.22
				25.25	52.5	0.469	80.5	997	8.80

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
1.2	12	3.327	37.78	25.5	52.5	0.465	81.3	1007	8.88
				30.25	58.5	0.392	96.5	1186	10.5
				30.5		0.389	97.2	1195	10.5
				35.25	64.5	0.336	112	1374	12.1
				35.5		0.334	113	1384	12.2
				40.25	70.5	0.294	128	1563	13.8
				40.5		0.293	129	1572	13.9
				45.25	76.5	0.262	144	1751	15.4
				45.5		0.260	145	1761	15.5
1.2	14	2.445	33.01	8.25	36.1	0.905	36.5	416	3.67
				8.5		0.878	37.6	427	3.76
				10.25	38.5	0.728	45.3	504	4.44
				10.5		0.711	46.5	515	4.54
				12.25	40.9	0.609	54.2	592	5.22
				12.5		0.597	55.3	603	5.32
				15.25	44.5	0.489	67.5	724	6.38
				15.5		0.481	68.6	735	6.48
				18.25	48.1	0.409	80.7	855	7.55
				18.5		0.403	81.8	866	7.64
				20.25	50.5	0.369	89.6	943	8.32
				20.5		0.364	90.7	954	8.42
				25.25	56.5	0.296	112	1163	10.3
				25.5		0.293	113	1174	10.4
				30.25	62.5	0.247	134	1383	12.2
				30.5		0.245	135	1394	12.3
				35.25	68.5	0.212	156	1603	14.1
				35.5		0.210	157	1614	14.2
				40.25	74.5	0.185	178	1823	16.1
				40.5		0.184	179	1834	16.2
				45.25	80.5	0.165	200	2043	18.0
				45.5		0.164	201	2054	18.1
1.6	8	23.66	111.3	8.25	26.8	15.3	7.27	238	3.72
				8.5		14.9	7.49	244	3.82
				10.25	30.0	12.3	9.03	288	4.51
				10.5		12.0	9.25	294	4.61
				12.25	33.2	10.3	10.8	338	5.30
				12.5		10.1	11.0	344	5.40
				15.25	38.0	8.29	13.4	413	6.48
				15.5		8.15	13.7	420	6.58
				18.25	42.8	6.93	16.1	489	7.67
				18.5		6.83	16.3	495	7.76
				20.25	46.0	6.24	17.8	539	8.45
				20.5		6.17	18.1	545	8.55
				25.25	54.0	5.01	22.2	665	10.4
				25.5		4.96	22.5	671	10.5
				30.25	62.0	4.18	26.6	790	12.4
				30.5		4.14	26.9	797	12.5
				35.25	70.0	3.59	31.0	916	14.4
				35.5		3.56	31.3	922	14.5
				40.25	78.0	3.14	35.5	1042	16.3
				40.5		3.12	35.7	1048	16.4
				45.25	86.0	2.79	39.9	1167	18.3
				45.5		2.78	40.1	1174	18.4



续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
1.6	9	18.70	102.0	8.25	28.8	10.8	9.48	267	4.19
				8.5		10.4	9.77	274	4.30
				10.25	32.0	8.66	11.8	324	5.08
				10.5		8.45	12.1	331	5.19
				12.25	35.2	7.25	14.1	380	5.96
				12.5		7.10	14.4	387	6.07
				15.25	40.0	5.82	17.5	465	7.29
				15.5		5.73	17.8	472	7.41
				18.25	44.8	4.86	21.0	550	8.62
				18.5		4.80	21.3	557	8.74
				20.25	48.0	4.38	23.3	606	9.51
				20.5		4.33	23.6	614	9.62
				25.25	56.0	3.52	29.0	748	11.7
				25.5		3.48	29.3	755	11.8
				30.25	64.0	2.93	34.8	889	13.9
				30.5		2.91	35.0	896	14.1
				35.25	72.0	2.52	40.5	1031	16.2
				35.5		2.50	40.8	1038	16.3
				40.25	80.0	2.21	46.2	1172	18.4
				40.5		2.19	46.5	1179	18.5
				45.25	88.0	1.96	52.0	1313	20.6
				45.5		1.95	52.3	1320	20.7
1.6	10	15.14	94.04	8.25	30.8	7.84	12.0	297	4.66
				8.5		7.61	12.4	305	4.78
				10.25	34.0	6.31	14.9	360	5.64
				10.5		6.16	15.3	368	5.76
				12.25	37.2	5.28	17.8	423	6.63
				12.5		5.18	18.2	430	6.75
				15.25	42.0	4.24	22.2	517	8.10
				15.5		4.18	22.5	525	8.23
				18.25	46.8	3.55	26.5	611	9.58
				18.5		3.50	26.9	619	9.71
				20.25	50.0	3.20	29.4	674	10.6
				20.5		3.16	29.8	682	10.7
				25.25	58.0	2.56	36.7	831	13.0
				25.5		2.54	37.1	839	13.2
				30.25	66.0	2.14	44.0	988	15.5
				30.5		2.12	44.3	996	15.6
				35.25	74.0	1.84	51.2	1145	18.0
				35.5		1.82	51.6	1153	18.1
				40.25	82.0	1.61	58.5	1302	20.4
				40.5		1.60	58.9	1310	20.5
				45.25	90.0	1.43	65.8	1459	22.9
				45.5		1.42	66.1	1467	23.0
1.6	12	10.52	81.24	8.25	34.8	4.54	17.9	356	5.59
				8.5		4.41	18.4	366	5.73
				10.25	38.0	3.65	22.2	432	6.77
				10.5		3.57	22.8	441	6.92
				12.25	41.2	3.06	26.6	507	7.95
				12.5		3.00	27.1	516	8.10
				15.25	46.0	2.46	33.1	620	9.73
				15.5		2.42	33.6	630	9.87
				18.25	50.8	2.05	39.6	733	11.5

96

## 普通圆柱螺旋拉伸弹簧

编号 Q81 - 3A

共 26 页

第 8 页

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
1.6	12	10.52	81.24	18.5	50.8	2.02	40.1	743	11.6
				20.25	54.0	1.85	43.9	809	12.7
				20.5		1.83	44.5	818	12.8
				25.25	62.0	1.48	54.8	997	15.6
				25.5		1.47	55.3	1007	15.8
				30.25	70.0	1.24	65.6	1186	18.6
				30.5		1.23	66.2	1195	18.7
				35.25	78.0	1.06	76.5	1374	21.6
				35.5		1.05	77.0	1384	21.7
				40.25	86.0	0.930	87.3	1563	24.5
				40.5		0.925	87.8	1572	24.7
				45.25	94.0	0.828	98.2	1751	27.5
				45.5		0.823	98.7	1761	27.6
1.6	14	7.726	71.44	8.25	38.8	2.86	25.0	416	6.52
				8.5		2.77	25.7	427	6.69
				10.25	42.0	2.30	31.0	504	7.90
				10.5		2.25	31.8	515	8.07
				12.25	45.2	1.93	37.1	592	9.28
				12.5		1.89	37.9	603	9.45
				15.25	50.0	1.55	46.2	724	11.3
				15.5		1.52	47.0	735	11.5
				18.25	54.8	1.29	55.3	855	13.4
				18.5		1.27	56.0	866	13.6
				20.25	58.0	1.16	61.3	943	14.8
				20.5		1.15	62.1	954	15.0
				25.25	66.0	0.934	76.5	1163	18.2
				25.5		0.925	77.2	1174	18.4
				30.25	74.0	0.780	91.6	1383	21.7
				30.5		0.773	92.4	1394	21.9
				35.25	82.0	0.669	107	1603	25.1
				35.5		0.664	108	1614	25.3
				40.25	90.0	0.586	122	1823	28.6
				40.5		0.582	123	1834	28.8
				45.25	98.0	0.521	137	2043	32.0
				45.5		0.518	138	2054	32.2
1.6	16	5.915	63.73	8.25	42.8	1.92	33.3	475	7.45
				8.5		1.86	34.3	488	7.65
				10.25	46.0	1.54	41.3	576	9.03
				10.5		1.50	42.3	588	9.22
				12.25	49.2	1.29	49.4	676	10.6
				12.5		1.26	50.4	689	10.8
				15.25	54.0	1.04	61.5	827	13.0
				15.5		1.02	62.5	839	13.2
				18.25	58.8	0.866	73.6	978	15.3
				18.5		0.854	74.6	990	15.5
				20.25	62.0	0.780	81.7	1078	16.9
				20.5		0.771	82.7	1091	17.1
				25.25	70.0	0.626	102	1330	20.9
				25.5		0.620	103	1342	21.0
				30.25	78.0	0.522	122	1581	24.8
				30.5		0.518	123	1593	25.0
				35.25	86.0	0.448	142	1832	28.7
				35.5		0.445	143	1845	28.9

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
1.6	16	5.915	63.73	40.25	94.0	0.393	162	2084	32.7
				40.5		0.390	163	2096	32.9
				45.25	102	0.349	183	2335	36.6
				45.5		0.347	184	2347	36.8
1.6	18	4.674	57.50	8.25	46.8	1.35	42.7	534	8.38
				8.5		1.31	44.0	549	8.60
				10.25	50.0	1.08	53.1	647	10.2
				10.5		1.06	54.4	662	10.4
				12.25	53.2	0.906	63.5	761	11.9
				12.5		0.888	64.8	775	12.1
				15.25	58.0	0.728	79.0	930	14.6
				15.5		0.716	80.3	944	14.8
				18.25	62.8	0.608	94.6	1100	17.2
				18.5		0.600	95.9	1114	17.5
				20.25	66.0	0.548	105	1213	19.0
				20.5		0.541	106	1227	19.2
				25.25	74.0	0.439	131	1496	23.5
				25.5		0.435	132	1510	23.7
				30.25	82.0	0.367	157	1778	27.9
				30.5		0.364	158	1793	28.1
				35.25	90.0	0.315	183	2061	32.3
				35.5		0.313	184	2075	32.5
				40.25	98.0	0.276	209	2344	36.8
				40.5		0.274	210	2358	37.0
2	10	36.97	169.3	45.25	106	0.245	234	2627	41.2
				45.5		0.244	236	2641	41.4
				8.25	33.5	19.2	8.84	297	7.27
				8.5		18.6	9.11	305	7.47
				10.25	37.5	15.4	11.0	360	8.81
				10.5		15.0	11.2	368	9.01
				12.25	41.5	12.9	13.1	423	10.4
				12.5		12.6	13.4	430	10.5
				15.25	47.5	10.4	16.3	517	12.7
				15.5		10.2	16.6	525	12.9
				18.25	53.5	8.66	19.6	611	15.0
				18.5		8.54	19.8	619	15.2
				20.25	57.5	7.80	21.7	674	16.5
				20.5		7.71	22.0	682	16.7
				25.25	67.5	6.26	27.1	831	20.4
				25.5		6.20	27.3	839	20.6
				30.25	77.5	5.22	32.4	988	24.2
				30.5		5.18	32.7	996	24.4
				35.25	87.5	4.48	37.8	1145	28.1
				35.5		4.45	38.0	1153	28.3
2	12	25.67	147.6	40.25	97.5	3.93	43.1	1302	31.9
				40.5		3.90	43.4	1310	32.1
				8.25	37.5	11.1	13.3	356	8.73
				8.5		10.8	13.7	366	8.96
				10.25	41.5	8.92	16.5	432	10.6
				10.5		8.71	16.9	441	10.8
				12.25	45.5	7.46	19.8	507	12.4
				12.5		7.31	20.2	516	12.7
				15.25	51.5	6.00	24.6	620	15.2

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>i</sub>	n	H <sub>0</sub>	P'	F <sub>i</sub>	L	Q(10 <sup>3</sup> )
2	12	25.67	147.6	15.5	51.5	5.90	25.0	630	15.4
				18.25	57.5	5.01	29.5	733	18.0
				18.5		4.94	29.9	743	18.2
				20.25	61.5	4.52	32.7	809	19.8
				20.5		4.46	33.1	818	20.0
				25.25	71.5	3.62	40.8	997	24.4
				25.5		3.59	41.2	1007	24.7
				30.25	81.5	3.02	48.8	1186	29.1
				30.5		3.00	49.2	1195	29.3
				35.25	91.5	2.59	56.9	1374	33.7
				35.5		2.58	57.3	1384	33.9
				40.25	102	2.27	65.0	1563	38.3
				40.5		2.26	65.4	1572	38.5
				45.25	112	2.02	73.0	1751	42.9
				45.5		2.01	73.4	1761	43.1
2	14	18.86	130.6	8.25	41.5	6.98	18.7	416	10.2
				8.5		6.77	19.3	427	10.5
				10.25	45.5	5.62	23.3	504	12.3
				10.5		5.48	23.8	515	12.6
				12.25	49.5	4.70	27.8	592	14.5
				12.5		4.61	28.4	603	14.8
				15.25	55.5	3.78	34.6	724	17.7
				15.5		3.71	35.2	735	18.0
				18.25	61.5	3.16	41.4	855	21.0
				18.5		3.11	42.0	866	21.2
				20.25	65.5	2.84	45.9	943	23.1
				20.5		2.81	46.5	954	23.4
				25.25	75.5	2.28	57.3	1163	28.5
				25.5		2.26	57.9	1174	28.8
				30.25	85.5	1.90	68.6	1383	33.9
				30.5		1.89	69.2	1394	34.2
				35.25	95.5	1.63	80.0	1603	39.3
				35.5		1.62	80.5	1614	39.6
				40.25	106	1.43	91.3	1823	44.7
				40.5		1.42	91.9	1834	44.9
2	16	14.44	117.1	8.25	45.5	4.68	25.0	475	11.6
				8.5		4.54	25.8	488	11.9
				10.25	49.5	3.76	31.1	576	14.1
				10.5		3.67	31.9	588	14.4
				12.25	53.5	3.15	37.2	676	16.6
				12.5		3.09	37.9	689	16.9
				15.25	59.5	2.53	46.3	827	20.3
				15.5		2.49	47.1	839	20.6
				18.25	65.5	2.11	55.4	978	24.0
				18.5		2.09	56.2	990	24.3
				20.25	69.5	1.90	61.5	1078	26.4
				20.5		1.88	62.2	1091	26.7
				25.25	79.5	1.53	76.6	1330	32.6
				25.5		1.51	77.4	1342	32.9
				30.25	89.5	1.28	91.8	1581	38.7
				30.5		1.26	92.6	1593	39.0
				35.25	99.5	1.09	107	1832	44.9
				35.5		1.09	108	1845	45.2

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
2	16	14.44	117.1	40.25	109	0.958	122	2084	51.1
				40.5		0.952	123	2096	51.4
2	18	11.41	106.0	8.25	49.5	3.28	32.3	534	13.1
				8.5		3.19	33.3	549	13.4
				10.25	53.5	2.64	40.1	647	15.9
				10.5		2.58	41.1	662	16.2
				12.25	57.5	2.21	48.0	761	18.6
				12.5		2.17	48.9	775	19.0
				15.25	63.5	1.78	59.7	930	22.8
				15.5		1.75	60.7	944	23.1
				18.25	69.5	1.48	71.4	1100	27.0
				18.5		1.46	72.4	1114	27.3
				20.25	73.5	1.34	79.3	1213	29.7
				20.5		1.32	80.2	1227	30.1
				25.25	83.5	1.07	98.8	1496	36.7
				25.5		1.06	99.8	1510	37.0
				30.25	93.5	0.896	118	1778	43.6
				30.5		0.888	119	1793	43.9
				35.25	103	0.769	138	2061	50.5
				35.5		0.763	139	2075	50.9
2	20	9.243	96.88	8.25	53.5	2.39	40.5	594	14.5
				8.5		2.32	41.7	609	14.9
				10.25	57.5	1.93	50.3	719	17.6
				10.5		1.88	51.5	735	18.0
				12.25	61.5	1.61	60.1	845	20.7
				12.5		1.58	61.3	861	21.1
				15.25	67.5	1.30	74.8	1034	25.3
				15.5		1.27	76.0	1049	25.7
				18.25	73.5	1.08	89.5	1222	29.9
				18.5		1.07	90.7	1238	30.3
				20.25	77.5	0.975	99.3	1348	33.0
				20.5		0.963	101	1363	33.4
				25.25	87.5	0.782	124	1662	40.7
				25.5		0.775	125	1678	41.1
				30.25	97.5	0.653	148	1976	48.4
				30.5		0.648	150	1992	48.8
				35.25	107	0.560	173	2290	56.1
				35.5		0.556	174	2306	56.5
2	22	7.638	89.16	40.25	117	0.491	197	2604	63.8
				40.5		0.488	199	2620	64.2
				8.25	57.5	1.80	49.6	653	16.0
				8.5		1.75	51.1	670	16.4
				10.25	61.5	1.45	61.6	791	19.4
				10.5		1.41	63.1	809	19.8
				12.25	65.5	1.21	73.6	930	22.8
				12.5		1.19	75.1	947	23.2
				15.25	71.5	0.973	91.6	1137	27.9
				15.5		0.957	93.1	1154	28.3
				18.25	77.5	0.813	110	1344	32.9
				18.5		0.802	111	1362	33.4
				20.25	81.5	0.733	122	1483	36.3
				20.5		0.724	123	1500	36.8
				25.25	91.5	0.588	152	1828	44.8

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
2	22	7.638	89.16	25.5	91.5	0.582	153	1845	45.2
				30.25	101	0.491	182	2174	53.3
				30.5		0.487	183	2191	53.7
				35.25	111	0.421	212	2519	61.7
				35.5		0.418	213	2537	62.2
				40.25	121	0.369	242	2865	70.2
				40.5		0.366	243	2882	70.6
2.5	12	62.68	249.7	8.25	40.9	27.1	9.23	356	13.6
				8.5		26.3	9.51	366	14.0
				10.25	45.9	21.8	11.5	432	16.5
				10.5		21.3	11.7	441	16.9
				12.25	50.9	18.2	13.7	507	19.4
				12.5		17.9	14.0	516	19.8
				15.25	58.4	14.6	17.1	620	23.7
				15.5		14.4	17.3	630	24.1
				18.25	65.9	12.2	20.4	733	28.1
				18.5		12.1	20.7	743	28.4
				20.25	70.9	11.0	22.6	809	31.0
				20.5		10.9	22.9	818	31.3
				25.25	83.4	8.84	28.2	997	38.2
				25.5		8.75	28.5	1007	38.5
				30.25	95.9	7.38	33.8	1186	45.4
				30.5		7.32	34.1	1195	45.8
				35.25	108	6.33	39.4	1374	52.6
				35.5		6.29	39.7	1384	53.0
				40.25	121	5.55	45.0	1563	59.8
				40.5		5.51	45.3	1572	60.2
2.5	14	46.05	222.9	8.25	44.9	17.0	13.1	416	15.9
				8.5		16.5	13.5	427	16.3
				10.25	49.9	13.7	16.2	504	19.3
				10.5		13.4	16.6	515	19.7
				12.25	54.9	11.5	19.4	592	22.6
				12.5		11.2	19.8	603	23.1
				15.25	62.4	9.22	24.2	724	27.7
				15.5		9.07	24.6	735	28.1
				18.25	69.9	7.70	28.9	855	32.8
				18.5		7.60	29.3	866	33.2
				20.25	74.9	6.94	32.1	943	36.1
				20.5		6.86	32.5	954	36.5
				25.25	87.4	5.57	40.0	1163	44.5
				25.5		5.51	40.4	1174	45.0
				30.25	99.9	4.65	48.0	1383	53.0
				30.5		4.61	48.4	1394	53.4
				35.25	112	3.99	55.9	1603	61.4
				35.5		3.96	56.3	1614	61.8
				40.25	125	3.49	63.8	1823	69.8
				40.5		3.47	64.2	1834	70.2
2.5	16	35.26	201.0	8.25	48.9	11.4	17.6	475	18.2
				8.5		11.1	18.1	488	18.7
				10.25	53.9	9.19	21.9	576	22.0
				10.5		8.97	22.4	588	22.5
				12.25	58.9	7.69	26.1	676	25.9
				12.5		7.53	26.7	689	26.4

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	<del>P<sub>2</sub></del>	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
2.5	16	35.26	201.0	15.25	66.4	6.18	32.5	827	31.7
				15.5		6.08	33.1	839	32.1
				18.25	73.9	5.16	38.9	978	37.4
				18.5		5.09	39.5	990	37.9
				20.25	78.9	4.65	43.2	1078	41.3
				20.5		4.59	43.8	1091	41.8
				25.25	91.4	3.73	53.9	1330	50.9
				25.5		3.69	54.4	1342	51.4
				30.25	104	3.11	64.6	1581	60.5
				30.5		3.09	65.1	1593	61.0
				35.25	116	2.67	75.2	1832	70.2
				35.5		2.65	75.8	1845	70.6
				40.25	129	2.34	85.9	2084	79.8
				40.5		2.33	86.4	2096	80.3
2.5	18	27.86	182.9	8.25	52.9	8.02	22.8	534	20.5
				8.5		7.78	23.5	549	21.0
				10.25	57.9	6.45	28.3	647	24.8
				10.5		6.30	29.0	662	25.3
				12.25	62.9	5.40	33.9	761	29.1
				12.5		5.29	34.6	775	29.7
				15.25	70.4	4.34	42.2	930	35.6
				15.5		4.27	42.9	944	36.2
				18.25	77.9	3.62	50.5	1100	42.1
				18.5		3.58	51.2	1114	42.7
				20.25	82.9	3.27	56.0	1213	46.4
				20.5		3.23	56.7	1227	47.0
				25.25	95.4	2.62	69.8	1496	57.3
				25.5		2.59	70.5	1510	57.8
				30.25	108	2.19	83.6	1778	68.1
				30.5		2.17	84.3	1793	68.6
				35.25	120	1.88	97.5	2061	78.9
				35.5		1.86	98.2	2075	79.5
2.5	20	22.56	167.7	40.25	133	1.64	111	2344	89.7
				40.5		1.63	112	2358	90.3
				8.25	56.9	5.84	28.7	594	22.7
				8.5		5.67	29.6	609	23.3
				10.25	61.9	4.70	35.7	719	27.5
				10.5		4.59	36.5	735	28.1
				12.25	66.9	3.94	42.6	845	32.4
				12.5		3.86	43.5	861	33.0
				15.25	74.4	3.16	53.0	1034	39.6
				15.5		3.11	53.9	1049	40.2
				18.25	81.9	2.64	63.5	1222	46.8
				18.5		2.61	64.3	1238	47.4
				20.25	86.9	2.38	70.4	1348	51.6
				20.5		2.35	71.3	1363	52.2
				25.25	99.4	1.91	87.8	1662	63.6
				25.5		1.89	88.7	1678	64.2
				30.25	112	1.59	105	1976	75.7
				30.5		1.58	106	1992	76.3
				35.25	124	1.37	123	2290	87.7
				35.5		1.36	123	2306	88.3
				40.25	137	1.20	140	2604	99.7

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
2.5	20	22.56	167.7	40.5	137	1.19	141	2620	100
2.5	22	18.65	154.8	8.25	60.9	4.39	35.3	653	25.0
				8.5		4.26	36.3	670	25.7
				10.25	65.9	3.53	43.8	791	30.3
				10.5		3.45	44.9	809	31.0
				12.25	70.9	2.96	52.3	930	35.6
				12.5		2.90	53.4	947	36.3
				15.25	78.4	2.38	65.2	1137	43.5
				15.5		2.34	66.2	1154	44.2
				18.25	85.9	1.99	78.0	1344	51.5
				18.5		1.96	79.1	1362	52.1
				20.25	90.9	1.79	86.5	1483	56.8
				20.5		1.77	87.6	1500	57.4
				25.25	103	1.43	108	1828	70.0
				25.5		1.42	109	1845	70.7
				30.25	116	1.20	129	2174	83.2
				30.5		1.19	130	2191	83.9
				35.25	128	1.03	151	2519	96.5
				35.5		1.02	152	2537	97.1
				40.25	141	0.900	172	2865	110
				40.5		0.894	173	2882	110
2.5	25	14.44	138.8	8.25	66.9	2.99	46.4	742	28.4
				8.5		2.90	47.8	762	29.2
				10.25	71.9	2.41	57.6	899	34.4
				10.5		2.35	59.0	919	35.2
				12.25	76.9	2.02	68.9	1056	40.4
				12.5		1.98	70.3	1076	41.2
				15.25	84.4	1.62	85.7	1292	49.5
				15.5		1.59	87.1	1312	50.2
				18.25	91.9	1.35	103	1528	58.5
				18.5		1.33	104	1547	59.2
				20.25	96.9	1.22	114	1685	64.5
				20.5		1.20	115	1704	65.3
				25.25	109	0.978	142	2077	79.5
				25.5		0.968	143	2097	80.3
				30.25	122	0.816	170	2470	94.6
				30.5		0.809	171	2490	95.3
				35.25	134	0.700	198	2863	110
				35.5		0.695	200	2882	110
				40.25	147	0.613	226	3255	125
				40.5		0.610	228	3275	125
3	14	95.49	366.8	8.25	48.2	35.3	10.4	416	22.9
				8.5		34.3	10.7	427	23.5
				10.25	54.2	28.4	12.9	504	27.8
				10.5		27.8	13.2	515	28.4
				12.25	60.2	23.8	15.4	592	32.6
				12.5		23.3	15.7	603	33.2
				15.25	69.2	19.1	19.2	724	39.9
				15.5		18.8	19.5	735	40.5
				18.25	78.2	16.0	23.0	855	47.2
				18.5		15.8	23.3	866	47.8
				20.25	84.2	14.4	25.5	943	52.0
				20.5		14.2	25.8	954	52.6



续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
3	14	95.49	366.8	25.25	99.2	11.5	31.8	1163	64.1
				25.5		11.4	32.1	1174	64.7
				30.25	114	9.64	38.1	1383	76.3
				30.5		9.56	38.4	1394	76.9
				35.25	129	8.27	44.4	1603	88.4
				35.5		8.21	44.7	1614	89.0
				40.25	144	7.24	50.6	1823	101
				40.5		7.20	51.0	1834	101
3	16	73.11	332.9	8.25	52.2	23.7	14.1	475	26.2
				8.5		23.0	14.5	488	26.9
				10.25	58.2	19.1	17.5	576	31.7
				10.5		18.6	17.9	588	32.4
				12.25	64.2	15.9	20.9	676	37.3
				12.5		15.6	21.3	689	38.0
				15.25	73.2	12.8	26.0	827	45.6
				15.5		12.6	26.4	839	46.3
				18.25	82.2	10.7	31.1	978	53.9
				18.5		10.6	31.5	990	54.6
				20.25	88.2	9.64	34.5	1078	59.4
				20.5		9.53	34.9	1091	60.1
				25.25	103	7.73	43.0	1330	73.3
				25.5		7.66	43.5	1342	74.0
				30.25	118	6.46	51.6	1581	87.2
				30.5		6.40	52.0	1593	87.9
				35.25	133	5.54	60.1	1832	101
				35.5		5.50	60.5	1845	102
				40.25	148	4.85	68.6	2084	115
				40.5		4.82	69.0	2096	116
3	18	57.77	304.4	8.25	56.2	16.6	18.3	534	29.5
				8.5		16.1	18.9	549	30.2
				10.25	62.2	13.4	22.7	647	35.7
				10.5		13.1	23.3	662	36.5
				12.25	68.2	11.2	27.2	761	41.9
				12.5		11.0	27.7	775	42.7
				15.25	77.2	8.99	33.8	930	51.3
				15.5		8.85	34.4	944	52.1
				18.25	86.2	7.52	40.5	1100	60.6
				18.5		7.41	41.1	1114	61.4
				20.25	92.2	6.77	44.9	1213	66.9
				20.5		6.69	45.5	1227	67.7
				25.25	107	5.43	56.0	1496	82.5
				25.5		5.38	56.6	1510	83.2
				30.25	122	4.53	67.1	1778	98.1
				30.5		4.50	67.7	1793	98.8
				35.25	137	3.89	78.2	2061	114
				35.5		3.86	78.8	2075	114
				40.25	152	3.41	89.3	2344	129
				40.5		3.39	89.9	2358	130
3	20	46.79	280.2	8.25	60.2	12.1	23.1	594	32.7
				8.5		11.8	23.8	609	33.6
				10.25	66.2	9.75	28.7	719	39.7
				10.5		9.52	29.4	735	40.5
				12.25	72.2	8.16	34.3	845	46.6

104

## 普通圆柱螺旋拉伸弹簧

编号 Q81 - 3A

共 26 页

第 16 页

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>i</sub>	n	H <sub>0</sub>	P'	F <sub>i</sub>	L	Q(10 <sup>3</sup> )
3	20	46.79	280.2	12.5	72.2	8.00	35.0	861	47.5
				15.25	81.2	6.56	42.7	1034	57.0
				15.5		6.45	43.4	1049	57.9
				18.25	90.2	5.48	51.1	1222	67.4
				18.5		5.40	51.8	1238	68.2
				20.25	96.2	4.94	56.7	1348	74.3
				20.5		4.88	57.4	1363	75.2
				25.25	111	3.96	70.8	1662	91.6
				25.5		3.92	71.5	1678	92.5
				30.25	126	3.31	84.8	1976	109
				30.5		3.28	85.5	1992	110
				35.25	141	2.84	98.8	2290	126
				35.5		2.82	99.5	2306	127
				40.25	156	2.48	113	2604	144
				40.5		2.47	113	2620	144
3	22	38.67	259.5	8.25	64.2	9.11	28.5	653	36.0
				8.5		8.84	29.4	670	37.0
				10.25	70.2	7.33	35.4	791	43.6
				10.5		7.15	36.3	809	44.6
				12.25	76.2	6.13	42.3	930	51.3
				12.5		6.01	43.2	947	52.2
				15.25	85.2	4.93	52.7	1137	62.7
				15.5		4.85	53.5	1154	63.6
				18.25	94.2	4.12	63.0	1344	74.1
				18.5		4.06	63.9	1362	75.1
				20.25	100	3.71	69.9	1483	81.7
				20.5		3.66	70.8	1500	82.7
				25.25	115	2.98	87.2	1828	101
				25.5		2.95	88.1	1845	102
				30.25	130	2.48	104	2174	120
				30.5		2.46	105	2191	121
				35.25	145	2.13	122	2519	139
				35.5		2.12	123	2537	140
				40.25	160	1.87	139	2865	158
3	25	29.95	233.4	40.5		1.85	140	2882	159
				8.25	70.2	6.21	37.6	742	40.9
				8.5		6.02	38.8	762	42.0
				10.25	76.2	4.99	46.7	899	49.6
				10.5		4.88	47.9	919	50.7
				12.25	82.2	4.18	55.9	1056	58.2
				12.5		4.10	57.0	1076	59.3
				15.25	91.2	3.36	69.5	1292	71.2
				15.5		3.30	70.7	1312	72.3
				18.25	100	2.81	83.2	1528	84.2
				18.5		2.77	84.3	1547	85.3
				20.25	106	2.53	92.3	1685	92.9
				20.5		2.50	93.5	1704	94.0
				25.25	121	2.03	115	2077	115
				25.5		2.01	116	2097	116
				30.25	136	1.69	138	2470	136
				30.5		1.68	139	2490	137
				35.25	151	1.45	161	2863	158
				35.5		1.44	162	2882	159

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
3	25	29.95	233.4	40.25	166	1.27	184	3255	179
				40.5		1.26	185	3275	181
				8.25	76.2	4.42	48.0	831	45.8
				8.5		4.29	49.5	853	47.0
				10.25	82.2	3.55	59.6	1007	55.5
				10.5		3.47	61.1	1029	56.7
				12.25	88.2	2.97	71.3	1183	65.2
				12.5		2.92	72.7	1205	66.4
				15.25	97.2	2.39	88.7	1447	79.8
	28	23.87	212.0	15.5		2.35	90.2	1469	81.0
				18.25	106	2.00	106	1711	94.3
				18.5		1.97	108	1733	95.5
				20.25	112	1.80	118	1887	104
				20.5		1.78	119	1909	105
				25.25	127	1.44	147	2327	128
				25.5		1.43	148	2349	129
				30.25	142	1.20	176	2766	153
				30.5		1.19	177	2788	154
				35.25	157	1.03	205	3206	177
4	20	147.9	564.2	35.5		1.03	207	3228	178
				40.25	172	0.905	234	3646	201
				40.5		0.900	236	3668	202
				8.25	67.0	38.3	14.7	594	58.2
				8.5		37.2	15.2	609	59.7
				10.25	75.0	30.8	18.3	719	70.5
				10.5		30.1	18.7	735	72.1
				12.25	83.0	25.8	21.9	845	82.8
				12.5		25.3	22.3	861	84.4
				15.25	95.0	20.7	27.2	1034	101
				15.5		20.4	27.7	1049	103
				18.25	107	17.3	32.6	1222	120
				18.5		17.1	33.0	1238	121
				20.25	115	15.6	36.2	1348	132
				20.5		15.4	36.6	1363	134
				25.25	135	12.5	45.1	1662	163
				25.5		12.4	45.5	1678	164
				30.25	155	10.4	54.0	1976	194
				30.5		10.4	54.5	1992	195
				35.25	175	8.96	62.9	2290	224
4	22	122.2	525.8	35.5		8.90	63.4	2306	226
				40.25	195	7.85	71.9	2604	255
				40.5		7.80	72.3	2620	257
				8.25	71.0	28.8	18.3	653	64.0
				8.5		27.9	18.8	670	65.7
				10.25	79.0	23.2	22.7	791	77.6
				10.5		22.6	23.3	809	79.3
				12.25	87.0	19.4	27.1	930	91.1
				12.5		19.0	27.7	947	92.8
				15.25	99.0	15.6	33.8	1137	111
				15.5		15.3	34.3	1154	113
				18.25	111	13.0	40.4	1344	132
				18.5		12.8	41.0	1362	133
				20.25	119	11.7	44.8	1483	145

106

## 普通圆柱螺旋拉伸弹簧

编号 Q81 - 3A

共 26 页

第 18 页

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
4	22	122.2	525.8	20.5	119	11.6	45.4	1500	147
				25.25	139	9.40	55.9	1828	179
				25.5		9.31	56.5	1845	181
				30.25	159	7.85	67.0	2174	213
				30.5		7.78	67.5	2191	215
				35.25	179	6.74	78.1	2519	247
				35.5		6.69	78.6	2537	249
				40.25	199	5.90	89.1	2865	281
4	25	94.64	476.6	40.5		5.86	89.7	2882	282
				8.25	77.0	19.6	24.3	742	72.7
				8.5		19.0	25.0	762	74.7
				10.25	85.0	15.8	30.2	899	88.1
				10.5		15.4	30.9	919	90.1
				12.25	93.0	13.2	36.1	1056	104
				12.5		12.9	36.8	1076	105
				15.25	105	10.6	44.9	1292	127
				15.5		10.4	45.7	1312	129
				18.25	117	8.87	53.8	1528	150
				18.5		8.75	54.5	1547	152
				20.25	125	7.99	59.6	1685	165
				20.5		7.89	60.4	1704	167
				25.25	145	6.41	74.4	2077	204
				25.5		6.34	75.1	2097	206
				30.25	165	5.35	89.1	2470	242
				30.5		5.30	89.8	2490	244
				35.25	185	4.59	104	2863	281
				35.5		4.56	105	2882	283
				40.25	205	4.02	119	3255	319
				40.5		3.99	119	3275	321
4	28	75.45	435.5	8.25	83.0	14.0	31.2	831	81.5
				8.5		13.5	32.1	853	83.6
				10.25	91.0	11.2	38.8	1007	98.7
				10.5		11.0	39.7	1029	101
				12.25	99.0	9.40	46.3	1183	116
				12.5		9.21	47.3	1205	118
				15.25	111	7.55	57.7	1447	142
				15.5		7.43	58.6	1469	144
				18.25	123	6.31	69.0	1711	168
				18.5		6.22	70.0	1733	170
				20.25	131	5.69	76.6	1887	185
				20.5		5.62	77.5	1909	187
				25.25	151	4.56	95.5	2327	228
				25.5		4.52	96.4	2349	230
				30.25	171	3.81	114	2766	271
				30.5		3.78	115	2788	273
				35.25	191	3.27	133	3206	314
				35.5		3.24	134	3228	316
				40.25	211	2.86	152	3646	357
				40.5		2.84	153	3668	360
4	32	57.77	390.3	8.25	91.0	9.35	41.7	950	93.1
				8.5		9.08	43.0	975	95.6
				10.25	99.0	7.53	51.9	1151	113
				10.5		7.35	53.1	1176	115

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
4	32	57.77	390.3	12.25	107	6.30	62.0	1352	133
				12.5		6.17	63.2	1377	135
				15.25	119	5.06	77.2	1654	162
				15.5		4.98	78.4	1679	165
				18.25	131	4.23	92.3	1955	192
				18.5		4.17	93.6	1980	194
				20.25	139	3.81	102	2156	211
				20.5		3.76	104	2182	214
				25.25	159	3.06	128	2659	261
				25.5		3.03	129	2684	263
				30.25	179	2.55	153	3162	310
				30.5		2.53	154	3187	312
				35.25	199	2.19	178	3664	359
				35.5		2.17	180	3689	362
				40.25	219	1.92	204	4167	408
				40.5		1.90	205	4192	411
4	35	48.29	362.0	8.25	97.0	7.15	50.7	1039	102
				8.5		6.94	52.2	1067	105
				10.25	105	5.75	62.9	1259	123
				10.5		5.62	64.5	1286	126
				12.25	113	4.81	75.2	1479	145
				12.5		4.72	76.8	1506	148
				15.25	125	3.87	93.6	1809	177
				15.5		3.80	95.2	1836	180
				18.25	137	3.23	112	2139	210
				18.5		3.19	114	2166	212
				20.25	145	2.91	124	2359	231
				20.5		2.88	126	2386	234
				25.25	165	2.34	155	2908	285
				25.5		2.31	157	2936	288
				30.25	185	1.95	186	3458	339
				30.5		1.93	187	3486	342
				35.25	205	1.67	216	4008	393
				35.5		1.66	218	4035	396
				40.25	225	1.46	247	4558	447
				40.5		1.46	249	4585	449
4	40	36.97	322.9	8.25	107	4.79	67.4	1188	116
				8.5		4.65	69.5	1219	119
				10.25	115	3.85	83.8	1439	141
				10.5		3.76	85.8	1470	144
				12.25	123	3.22	100	1690	166
				12.5		3.16	102	1722	169
				15.25	135	2.59	125	2067	203
				15.5		2.55	127	2099	206
				18.25	147	2.16	149	2444	240
				18.5		2.14	151	2476	243
				20.25	155	1.95	166	2695	264
				20.5		1.93	168	2727	267
				25.25	175	1.56	206	3324	326
				25.5		1.55	208	3355	329
				30.25	195	1.31	247	3952	387
				30.5		1.30	249	3984	390
				35.25	215	1.12	288	4580	449

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
4	40	36.97	322.9	35.5	215	1.11	290	4612	452
				40.25	235	0.981	329	5209	511
				40.5		0.975	331	5240	514
4	45	29.21	291.4	8.25	117	3.36	86.6	1336	131
				8.5		3.26	89.3	1371	134
				10.25	125	2.71	108	1619	159
				10.5		2.64	110	1654	162
				12.25	133	2.26	129	1901	186
				12.5		2.22	131	1937	190
				15.25	145	1.82	160	2326	228
				15.5		1.79	163	2361	231
				18.25	157	1.52	192	2750	270
				18.5		1.50	194	2785	273
				20.25	165	1.37	213	3032	297
				20.5		1.35	215	3068	301
				25.25	185	1.10	265	3739	367
				25.5		1.09	268	3775	370
				30.25	205	0.917	318	4446	436
				30.5		0.910	320	4481	439
				35.25	225	0.787	370	5153	505
				35.5		0.781	373	5188	509
5	25	231.1	822.8	40.25	245	0.689	423	5860	574
				40.5		0.685	425	5895	578
				8.25	83.7	47.9	17.2	742	114
				8.5		46.5	17.7	762	117
				10.25	93.7	38.5	21.4	899	138
				10.5		37.6	21.9	919	141
				12.25	104	32.2	25.5	1056	162
				12.5		31.6	26.0	1076	165
				15.25	119	25.9	31.8	1292	198
				15.5		25.5	32.3	1312	201
				18.25	134	21.6	38.0	1528	234
				18.5		21.4	38.5	1547	237
				20.25	144	19.5	42.2	1685	258
				20.5		19.3	42.7	1704	261
				25.25	169	15.6	52.6	2077	318
				25.5		15.5	53.1	2097	321
				30.25	194	13.1	63.0	2470	378
				30.5		13.0	63.5	2490	381
5	28	184.2	756.4	35.25	219	11.2	73.4	2863	438
				35.5		11.1	73.9	2882	441
				8.25	89.7	34.1	22.2	831	127
				8.5		33.1	22.9	853	131
				10.25	99.7	27.4	27.6	1007	154
				10.5		26.8	28.2	1029	158
				12.25	110	23.0	33.0	1183	181
				12.5		22.5	33.6	1205	185
				15.25	125	18.4	41.0	1447	222
				15.5		18.1	41.7	1469	225
				18.25	140	15.4	49.1	1711	262
				18.5		15.2	49.8	1733	265
				20.25	150	13.9	54.5	1887	289
				20.5		13.7	55.2	1909	292

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>i</sub>	L	Q(10 <sup>3</sup> )
5	28	184.2	756.4	25.25	175	11.1	67.9	2327	356
				25.5		11.0	68.6	2349	360
				30.25	200	9.29	81.4	2766	424
				30.5		9.22	82.1	2788	427
				35.25	225	7.98	94.8	3206	491
				35.5		7.92	95.5	3228	494
				8.25	93.7	27.7	25.9	891	136
				8.5		26.9	26.7	914	140
				10.25	104	22.3	32.2	1079	165
				10.5		21.8	33.0	1103	169
				12.25	114	18.7	38.4	1268	194
				12.5		18.3	39.2	1291	198
5	30	160.5	717.4	15.25	129	15.0	47.9	1550	237
				15.5		14.7	48.6	1574	241
				18.25	144	12.5	57.3	1833	281
				18.5		12.4	58.1	1857	284
				20.25	154	11.3	63.6	2022	310
				20.5		11.2	64.3	2045	313
				25.25	179	9.05	79.2	2493	382
				25.5		8.96	80.0	2516	385
				30.25	204	7.56	94.9	2964	454
				30.5		7.49	95.7	2988	458
				35.25	229	6.48	111	3435	526
				35.5		6.44	111	3459	530
5	35	117.9	635.0	8.25	104	17.4	36.4	1039	159
				8.5		16.9	37.5	1067	163
				10.25	114	14.0	45.2	1259	193
				10.5		13.7	46.3	1286	197
				12.25	124	11.8	54.0	1479	226
				12.5		11.5	55.1	1506	231
				15.25	139	9.44	67.3	1809	277
				15.5		9.29	68.4	1836	281
				18.25	154	7.89	80.5	2139	328
				18.5		7.78	81.6	2166	332
				20.25	164	7.11	89.3	2359	361
				20.5		7.02	90.4	2386	365
				25.25	189	5.70	111	2908	445
				25.5		5.65	112	2936	450
				30.25	214	4.76	133	3458	530
				30.5		4.72	135	3486	534
				35.25	239	4.08	156	4008	614
				35.5		4.05	157	4035	618
5	40	90.26	569.2	8.25	114	11.7	48.7	1188	182
				8.5		11.3	50.2	1219	187
				10.25	124	9.41	60.5	1439	220
				10.5		9.18	62.0	1470	225
				12.25	134	7.87	72.3	1690	259
				12.5		7.71	73.8	1722	264
				15.25	149	6.32	90.0	2067	317
				15.5		6.22	91.5	2099	321
				18.25	164	5.28	108	2444	374
				18.5		5.21	109	2476	379
				20.25	174	4.76	120	2695	413

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
5	40	90.26	569.2	20.5	174	4.70	121	2727	418
				25.25	199	3.82	149	3324	509
				25.5		3.78	151	3355	514
				30.25	224	3.19	179	3952	605
				30.5		3.16	180	3984	610
				35.25	249	2.74	208	4580	702
				35.5		2.72	210	4612	706
5	45	71.32	515.5	8.25	124	8.21	62.8	1336	205
				8.5		7.97	64.7	1371	210
				10.25	134	6.61	78.0	1619	248
				10.5		6.45	79.9	1654	253
				12.25	144	5.53	93.2	1901	291
				12.5		5.42	95.1	1937	297
				15.25	159	4.44	116	2326	356
				15.5		4.37	118	2361	362
				18.25	174	3.71	139	2750	421
				18.5		3.66	141	2785	427
				20.25	184	3.34	154	3032	464
				20.5		3.30	156	3068	470
				25.25	209	2.68	192	3739	573
				25.5		2.66	194	3775	578
				30.25	234	2.24	230	4446	681
				30.5		2.22	232	4481	686
				35.25	259	1.92	268	5153	789
				35.5		1.91	270	5188	795
5	50	57.77	470.9	8.25	134	5.98	78.7	1484	227
				8.5		5.81	81.1	1524	233
				10.25	144	4.82	97.8	1799	275
				10.5		4.70	100	1838	281
				12.25	154	4.03	117	2113	324
				12.5		3.95	119	2152	330
				15.25	169	3.24	145	2584	396
				15.5		3.19	148	2623	402
				18.25	184	2.71	174	3055	468
				18.5		2.67	176	3094	474
				20.25	194	2.44	193	3369	516
				20.5		2.41	196	3409	522
				25.25	219	1.96	241	4155	636
				25.5		1.94	243	4194	642
				30.25	244	1.63	289	4940	757
				30.5		1.62	291	4979	763
				35.25	269	1.40	336	5726	877
				35.5		1.39	339	5765	883
5	60	40.12	401.4	8.25	154	3.46	116	1781	273
				8.5		3.36	119	1828	280
				10.25	164	2.79	144	2158	331
				10.5		2.72	147	2205	338
				12.25	174	2.33	172	2535	388
				12.5		2.29	176	2582	396
				15.25	189	1.87	214	3101	475
				15.5		1.84	218	3148	482
				18.25	204	1.57	256	3666	561
				18.5		1.54	260	3713	569



续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
5	60	40.12	401.4	20.25	214	1.41	284	4043	619
				20.5		1.39	288	4090	626
				25.25	239	1.13	355	4986	764
				25.5		1.12	358	5033	771
				30.25	264	0.945	425	5928	908
				30.5		0.937	428	5975	915
				35.25	289	0.811	495	6871	1052
				35.5		0.805	499	6918	1059
6	30	332.7	1143	8.25	100	57.5	19.9	891	196
				8.5		55.8	20.5	914	202
				10.25	112	46.2	24.7	1079	238
				10.5		45.1	25.3	1103	243
				12.25	124	38.7	29.5	1268	280
				12.5		37.9	30.1	1291	285
				15.25	142	31.1	36.8	1550	342
				15.5		30.6	37.4	1574	347
				18.25	160	26.0	44.0	1833	404
				18.5		25.6	44.6	1857	409
				20.25	172	23.4	48.8	2022	446
				20.5		23.1	49.4	2045	451
				25.25	202	18.8	60.9	2493	550
				25.5		18.6	61.5	2516	555
				30.25	232	15.7	72.9	2964	654
				30.5		15.5	73.5	2988	659
				35.25	262	13.4	85.0	3435	758
				35.5		13.4	85.6	3459	763
6	32	292.4	1090	8.25	104	47.3	23.0	950	210
				8.5		45.9	23.7	975	215
				10.25	116	38.1	28.6	1151	254
				10.5		37.2	29.3	1176	259
				12.25	128	31.9	34.2	1352	298
				12.5		31.2	34.9	1377	304
				15.25	146	25.6	42.5	1654	365
				15.5		25.2	43.2	1679	370
				18.25	164	21.4	50.9	1955	431
				18.5		21.1	51.6	1980	437
				20.25	176	19.3	56.5	2156	476
				20.5		19.1	57.2	2182	481
				25.25	206	15.5	70.4	2659	586
				25.5		15.3	71.1	2684	592
				30.25	236	12.9	84.4	3162	697
				30.5		12.8	85.1	3187	703
				35.25	266	11.1	98.3	3664	808
				35.5		11.0	99.0	3689	814
6	35	244.5	1018	8.25	110	36.2	28.1	1039	229
				8.5		35.1	29.0	1067	235
				10.25	122	29.1	35.0	1259	278
				10.5		28.4	35.8	1286	284
				12.25	134	24.4	41.8	1479	326
				12.5		23.9	42.6	1506	332
				15.25	152	19.6	52.0	1809	399
				15.5		19.3	52.9	1836	405
				18.25	170	16.4	62.2	2139	472

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
6	35	244.5	1018	18.5	170	16.1	63.1	2166	478
				20.25	182	14.7	69.1	2359	520
				20.5		14.6	69.9	2386	526
				25.25	212	11.8	86.1	2908	641
				25.5		11.7	87.0	2936	647
				30.25	242	9.87	103	3458	763
				30.5		9.79	104	3486	769
				35.25	272	8.47	120	4008	884
				35.5		8.41	121	4035	890
6	40	187.2	917.0	8.25	120	24.2	37.8	1188	262
				8.5		23.5	39.0	1219	269
				10.25	132	19.5	47.0	1439	317
				10.5		19.0	48.2	1470	324
				12.25	144	16.3	56.2	1690	373
				12.5		16.0	57.3	1722	380
				15.25	162	13.1	69.9	2067	456
				15.5		12.9	71.1	2099	463
				18.25	180	11.0	83.7	2444	539
				18.5		10.8	84.8	2476	546
				20.25	192	9.88	92.9	2695	594
				20.5		9.75	94.0	2727	601
				25.25	222	7.92	116	3324	733
				25.5		7.84	117	3355	740
				30.25	252	6.61	139	3952	872
				30.5		6.56	140	3984	879
				35.25	282	5.67	162	4580	1010
				35.5		5.63	163	4612	1017
6	50	119.8	763.9	8.25	140	12.4	61.6	1484	327
				8.5		12.0	63.4	1524	336
				10.25	152	9.99	76.5	1799	397
				10.5		9.75	78.3	1838	405
				12.25	164	8.36	91.4	2113	466
				12.5		8.19	93.3	2152	475
				15.25	182	6.71	114	2584	570
				15.5		6.61	116	2623	579
				18.25	200	5.61	136	3055	674
				18.5		5.53	138	3094	682
				20.25	212	5.06	151	3369	743
				20.5		4.99	153	3409	752
				25.25	242	4.05	188	4155	916
				25.5		4.02	190	4194	925
				30.25	272	3.38	226	4940	1090
				30.5		3.36	228	4979	1098
				35.25	302	2.90	263	5726	1263
				35.5		2.88	265	5765	1271
6	55	98.99	704.7	8.25	150	9.32	75.6	1633	360
				8.5		9.05	77.9	1676	370
				10.25	162	7.50	93.9	1978	436
				10.5		7.33	96.2	2022	446
				12.25	174	6.28	112	2324	513
				12.5		6.15	115	2367	522
				15.25	192	5.04	140	2842	627
				15.5		4.96	142	2886	636

续表 2

d	D <sub>2</sub>	P <sub>0</sub>	P <sub>1</sub>	n	H <sub>0</sub>	P'	F <sub>1</sub>	L	Q(10 <sup>3</sup> )
6	55	98.99	704.7	18.25	210	4.21	167	3361	741
				18.5		4.16	169	3404	751
				20.25	222	3.80	186	3706	817
				20.5		3.75	188	3749	827
				25.25	252	3.05	231	4570	1008
				25.5		3.02	234	4613	1017
				30.25	282	2.54	277	5434	1198
				30.5		2.52	279	5477	1208
				35.25	312	2.18	323	6298	1389
				35.5		2.17	325	6341	1399
6	60	83.18	653.9	8.25	160	7.18	91.1	1781	393
				8.5		6.97	93.8	1828	403
				10.25	172	5.78	113	2158	476
				10.5		5.64	116	2205	486
				12.25	184	4.84	135	2535	559
				12.5		4.74	138	2582	570
				15.25	202	3.89	168	3101	684
				15.5		3.82	171	3148	694
				18.25	220	3.25	201	3666	809
				18.5		3.20	204	3713	819
				20.25	232	2.93	223	4043	892
				20.5		2.89	226	4090	902
				25.25	262	2.35	279	4986	1100
				25.5		2.32	281	5033	1110
				30.25	292	1.96	334	5928	1307
				30.5		1.94	337	5975	1318
				35.25	322	1.68	389	6871	1515
				35.5		1.67	392	6918	1526
6	70	61.11	571.4	8.25	180	4.52	126	2078	458
				8.5		4.39	130	2133	470
				10.25	192	3.64	157	2518	555
				10.5		3.55	161	2573	567
				12.25	204	3.05	188	2958	652
				12.5		2.98	191	3013	664
				15.25	222	2.45	234	3618	798
				15.5		2.41	237	3673	810
				18.25	240	2.04	279	4277	943
				18.5		2.02	283	4332	955
				20.25	252	1.84	310	4717	1040
				20.5		1.82	314	4772	1052
				25.25	282	1.48	387	5817	1283
				25.5		1.46	391	5872	1295
				30.25	312	1.23	463	6916	1525
				30.5		1.22	467	6971	1537
				35.25	342	1.06	540	8016	1768
				35.5		1.05	544	8071	1780

注: ①弹簧钩环开口宽度  $a = D_2 / 3$ 。

②弹簧旋向规定为右旋。

③无三角符号的需申请同意后采用, ▲ 表示 A 型, △ 表示 B 型。

114

## 普通圆柱螺旋拉伸弹簧

编号 Q81 — 3A

共 26 页

第 26 页

## 技术要求:

1 弹簧的负荷、中径、自由长度的极限偏差冷卷弹簧按 GB1239.1 — 89 (热卷按 GB1239.4 — 89) 规定的 3 级精度。钩环直径按弹簧中径 3 级精度的极限偏差。

2 弹簧表面应氧化处理。

3 其它技术要求按 GB1239.1 — 89 的规定。