

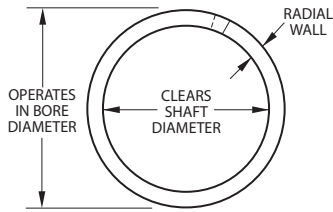


Stock Items in carbon steel and 17-7 PH/C stainless steel.

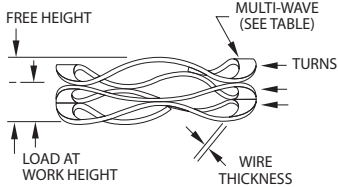
Smalley Part Number <sup>1,2,5</sup>	Operates in Bore Diameter	Clears Shaft Diameter	Load (lb)	Work Height	Free Height <sup>3</sup>	Number of Waves	Number of Turns	Thickness	Radial Wall	Spring Rate <sup>4</sup>
<b>C025-L1*</b>	.250	.150	2	.033	.075	2.5	3	.006	.024	48
<b>C025-L2*</b>	.250	.150	2	.050	.100	2.5	4	.006	.024	40
<b>C025-L3*</b>	.250	.150	2	.060	.125	2.5	5	.006	.024	31
<b>C025-L4*</b>	.250	.150	2	.075	.150	2.5	6	.006	.024	27
<b>C025-L5*</b>	.250	.150	2	.085	.175	2.5	7	.006	.024	22
<b>C025-L6*</b>	.250	.150	2	.095	.200	2.5	8	.006	.024	19
<b>C025-L7*</b>	.250	.150	2	.120	.225	2.5	9	.006	.024	19
<b>C025-L8*</b>	.250	.150	2	.140	.275	2.5	11	.006	.024	15
<b>C025-L9*</b>	.250	.150	2	.170	.325	2.5	13	.006	.024	13
<b>C025-M1*</b>	.250	.150	5	.037	.075	2.5	3	.008	.024	132
<b>C025-M2*</b>	.250	.150	5	.048	.100	2.5	4	.008	.024	96
<b>C025-M3*</b>	.250	.150	5	.065	.125	2.5	5	.008	.024	83
<b>C025-M4*</b>	.250	.150	5	.075	.150	2.5	6	.008	.024	67
<b>C025-M5*</b>	.250	.150	5	.090	.175	2.5	7	.008	.024	59
<b>C025-M6*</b>	.250	.150	5	.100	.200	2.5	8	.008	.024	50
<b>C025-M7*</b>	.250	.150	5	.120	.225	2.5	9	.008	.024	48
<b>C025-M8*</b>	.250	.150	5	.148	.275	2.5	11	.008	.024	39
<b>C025-M9*</b>	.250	.150	5	.175	.325	2.5	13	.008	.024	33
<b>C031-L1</b>	.312	.200	3	.070	.114	2.5	3	.008	.032	68
<b>C031-L2</b>	.312	.200	3	.096	.152	2.5	4	.008	.032	54
<b>C031-L3</b>	.312	.200	3	.118	.190	2.5	5	.008	.032	42
<b>C031-L4</b>	.312	.200	3	.145	.228	2.5	6	.008	.032	36
<b>C031-L5</b>	.312	.200	3	.165	.266	2.5	7	.008	.032	30
<b>C031-L6</b>	.312	.200	3	.195	.304	2.5	8	.008	.032	28
<b>C031-L7</b>	.312	.200	3	.215	.342	2.5	9	.008	.032	24
<b>C031-L8</b>	.312	.200	3	.262	.418	2.5	11	.008	.032	19
<b>C031-L9</b>	.312	.200	3	.309	.494	2.5	13	.008	.032	16
<b>C031-M1</b>	.312	.200	6	.072	.114	2.5	3	.010	.032	143
<b>C031-M2</b>	.312	.200	6	.096	.152	2.5	4	.010	.032	107
<b>C031-M3</b>	.312	.200	6	.123	.190	2.5	5	.010	.032	90
<b>C031-M4</b>	.312	.200	6	.144	.228	2.5	6	.010	.032	71
<b>C031-M5</b>	.312	.200	6	.176	.266	2.5	7	.010	.032	67
<b>C031-M6</b>	.312	.200	6	.197	.304	2.5	8	.010	.032	56
<b>C031-M7</b>	.312	.200	6	.227	.342	2.5	9	.010	.032	52
<b>C031-M8</b>	.312	.200	6	.278	.418	2.5	11	.010	.032	43
<b>C031-M9</b>	.312	.200	6	.336	.494	2.5	13	.010	.032	38
<b>C037-L1</b>	.375	.250	4	.062	.150	2.5	3	.008	.032	45
<b>C037-L2</b>	.375	.250	4	.098	.200	2.5	4	.008	.032	39
<b>C037-L3</b>	.375	.250	4	.108	.250	2.5	5	.008	.032	28
<b>C037-L4</b>	.375	.250	4	.135	.300	2.5	6	.008	.032	24
<b>C037-L5</b>	.375	.250	4	.150	.350	2.5	7	.008	.032	20
<b>C037-L6</b>	.375	.250	4	.184	.400	2.5	8	.008	.032	19
<b>C037-L7</b>	.375	.250	4	.195	.450	2.5	9	.008	.032	16
<b>C037-L8</b>	.375	.250	4	.228	.500	2.5	10	.008	.032	15
<b>C037-L9</b>	.375	.250	4	.240	.550	2.5	11	.008	.032	13
<b>C037-M1</b>	.375	.250	7	.081	.150	2.5	3	.011	.032	101
<b>C037-M2</b>	.375	.250	7	.119	.200	2.5	4	.011	.032	86
<b>C037-M3</b>	.375	.250	7	.145	.250	2.5	5	.011	.032	67
<b>C037-M4</b>	.375	.250	7	.180	.300	2.5	6	.011	.032	58
<b>C037-M5</b>	.375	.250	7	.202	.350	2.5	7	.011	.032	47
<b>C037-M6</b>	.375	.250	7	.240	.400	2.5	8	.011	.032	44
<b>C037-M7</b>	.375	.250	7	.262	.450	2.5	9	.011	.032	37
<b>C037-M8</b>	.375	.250	7	.298	.500	2.5	10	.011	.032	35
<b>C037-M9</b>	.375	.250	7	.327	.550	2.5	11	.011	.032	31

## Product Dimensions

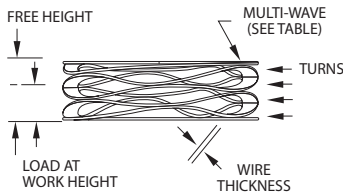
All dimensions in inches unless otherwise specified.



### Plain Ends



### Shim Ends



## Order Options

**C037-L1**

### End options:

Plain ends . . . . . **C**  
 Squared-shim ends. . . . . **CS**

### Material option:

Carbon Steel . . . . . **(blank)**  
 Stainless Steel . . . . . **-S17**

<sup>1</sup> Use "C" prefix for plain ends. Use "CS" prefix for squared-shim ends.

<sup>2</sup> Add suffix "-S17" for 17-7 stainless steel.

<sup>3</sup> Reference dimension.

<sup>4</sup> Theoretical dimension; measured in lb/in.

<sup>5</sup> See See pages 126-127 for How to Order.

\*Not available with shim ends

Stock Items in carbon steel and 17-7 PH/C stainless steel.

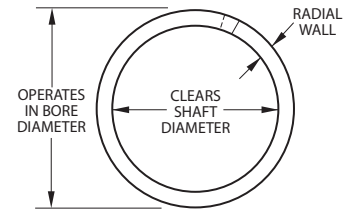
Smalley Part Number <sup>1,2,5</sup>	Operates in Bore Diameter	Clears Shaft Diameter	Load (lb)	Work Height	Free Height <sup>3</sup>	Number of Waves	Number of Turns	Thickness	Radial Wall	Spring Rate <sup>4</sup>
C043-L1	.437	.281	4	.063	.165	2.5	3	.008	.040	39
C043-L2	.437	.281	4	.093	.220	2.5	4	.008	.040	31
C043-L3	.437	.281	4	.109	.275	2.5	5	.008	.040	24
C043-L4	.437	.281	4	.143	.330	2.5	6	.008	.040	21
C043-L5	.437	.281	4	.160	.385	2.5	7	.008	.040	18
C043-L6	.437	.281	4	.195	.440	2.5	8	.008	.040	16
C043-L7	.437	.281	4	.210	.495	2.5	9	.008	.040	14
C043-L8	.437	.281	4	.240	.550	2.5	10	.008	.040	13
C043-L9	.437	.281	4	.260	.605	2.5	11	.008	.040	12
C043-M1	.437	.281	8	.082	.165	2.5	3	.011	.046	96
C043-M2	.437	.281	8	.115	.220	2.5	4	.011	.046	76
C043-M3	.437	.281	8	.142	.275	2.5	5	.011	.046	60
C043-M4	.437	.281	8	.179	.330	2.5	6	.011	.046	53
C043-M5	.437	.281	8	.198	.385	2.5	7	.011	.046	43
C043-M6	.437	.281	8	.231	.440	2.5	8	.011	.046	38
C043-M7	.437	.281	8	.255	.495	2.5	9	.011	.046	33
C043-M8	.437	.281	8	.290	.550	2.5	10	.011	.046	31
C043-M9	.437	.281	8	.319	.605	2.5	11	.011	.046	28
C050-L1	.500	.312	5	.062	.180	2.5	3	.008	.056	42
C050-L2	.500	.312	5	.090	.240	2.5	4	.008	.056	33
C050-L3	.500	.312	5	.107	.300	2.5	5	.008	.056	26
C050-L4	.500	.312	5	.136	.360	2.5	6	.008	.056	22
C050-L5	.500	.312	5	.150	.420	2.5	7	.008	.056	19
C050-L6	.500	.312	5	.180	.480	2.5	8	.008	.056	17
C050-L7	.500	.312	5	.195	.540	2.5	9	.008	.056	14
C050-L8	.500	.312	5	.220	.600	2.5	10	.008	.056	13
C050-L9	.500	.312	5	.240	.660	2.5	11	.008	.056	12
C050-M1	.500	.312	10	.065	.180	2.5	3	.010	.058	87
C050-M2	.500	.312	10	.092	.240	2.5	4	.010	.058	68
C050-M3	.500	.312	10	.114	.300	2.5	5	.010	.058	54
C050-M4	.500	.312	10	.147	.360	2.5	6	.010	.058	47
C050-M5	.500	.312	10	.162	.420	2.5	7	.010	.058	39
C050-M6	.500	.312	10	.196	.480	2.5	8	.010	.058	35
C050-M7	.500	.312	10	.207	.540	2.5	9	.010	.058	30
C050-M8	.500	.312	10	.246	.600	2.5	10	.010	.058	28
C050-M9	.500	.312	10	.264	.660	2.5	11	.010	.058	25
C050-H1	.500	.312	15	.075	.180	2.5	3	.012	.060	143
C050-H2	.500	.312	15	.110	.240	2.5	4	.012	.060	115
C050-H3	.500	.312	15	.136	.300	2.5	5	.012	.060	91
C050-H4	.500	.312	15	.167	.360	2.5	6	.012	.060	78
C050-H5	.500	.312	15	.182	.420	2.5	7	.012	.060	63
C050-H6	.500	.312	15	.216	.480	2.5	8	.012	.060	57
C050-H7	.500	.312	15	.240	.540	2.5	9	.012	.060	50
C050-H8	.500	.312	15	.280	.600	2.5	10	.012	.060	47
C050-H9	.500	.312	15	.312	.660	2.5	11	.012	.060	43
C056-L1	.562	.375	5	.080	.195	2.5	3	.009	.058	43
C056-L2	.562	.375	5	.125	.260	2.5	4	.009	.058	37
C056-L3	.562	.375	5	.135	.325	2.5	5	.009	.058	26
C056-L4	.562	.375	5	.180	.390	2.5	6	.009	.058	24
C056-L5	.562	.375	5	.190	.455	2.5	7	.009	.058	19
C056-L6	.562	.375	5	.230	.520	2.5	8	.009	.058	17
C056-L7	.562	.375	5	.260	.585	2.5	9	.009	.058	15
C056-L8	.562	.375	5	.285	.650	2.5	10	.009	.058	14
C056-L9	.562	.375	5	.315	.715	2.5	11	.009	.058	13

<sup>1</sup> Use "C" prefix for plain ends. Use "CS" prefix for squared-shim ends.  
<sup>2</sup> Add suffix "-S17" for 17-7 stainless steel.  
<sup>3</sup> Reference dimension.  
<sup>4</sup> Theoretical dimension; measured in lb/in.  
<sup>5</sup> See pages 126-127 for How to Order.

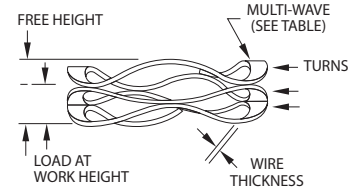


### Product Dimensions

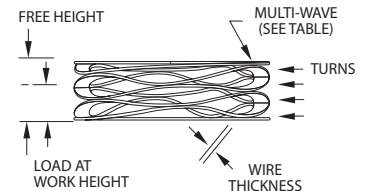
All dimensions in inches unless otherwise specified.



#### Plain Ends



#### Shim Ends



### Order Options

**C037-L1**

#### End options:

Plain ends . . . . . **C**  
 Squared-shim ends. . . . . **CS**

#### Material option:

Carbon Steel . . . . . **(blank)**  
 Stainless Steel . . . . . **-S17**

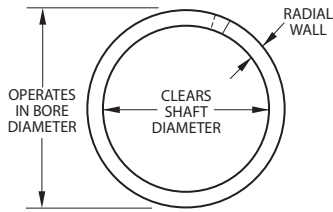


Stock Items in carbon steel and 17-7 PH/C stainless steel.

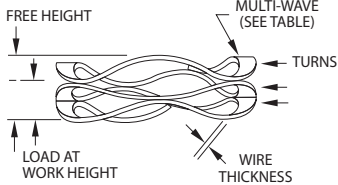
Smalley Part Number <sup>1,2,5</sup>	Operates in Bore Diameter	Clears Shaft Diameter	Load (lb)	Work Height	Free Height <sup>3</sup>	Number of Waves	Number of Turns	Thickness	Radial Wall	Spring Rate <sup>4</sup>
<b>C056-M1</b>	.562	.375	11	.086	.195	2.5	3	.012	.060	101
<b>C056-M2</b>	.562	.375	11	.123	.260	2.5	4	.012	.060	80
<b>C056-M3</b>	.562	.375	11	.145	.325	2.5	5	.012	.060	61
<b>C056-M4</b>	.562	.375	11	.187	.390	2.5	6	.012	.060	54
<b>C056-M5</b>	.562	.375	11	.209	.455	2.5	7	.012	.060	45
<b>C056-M6</b>	.562	.375	11	.253	.520	2.5	8	.012	.060	41
<b>C056-M7</b>	.562	.375	11	.273	.585	2.5	9	.012	.060	35
<b>C056-M8</b>	.562	.375	11	.318	.650	2.5	10	.012	.060	33
<b>C056-M9</b>	.562	.375	11	.343	.715	2.5	11	.012	.060	30
<b>C056-H1</b>	.562	.375	18	.093	.195	2.5	3	.015	.060	176
<b>C056-H2</b>	.562	.375	18	.136	.260	2.5	4	.015	.060	145
<b>C056-H3</b>	.562	.375	18	.165	.325	2.5	5	.015	.060	113
<b>C056-H4</b>	.562	.375	18	.212	.390	2.5	6	.015	.060	101
<b>C056-H5</b>	.562	.375	18	.245	.455	2.5	7	.015	.060	86
<b>C056-H6</b>	.562	.375	18	.282	.520	2.5	8	.015	.060	76
<b>C056-H7</b>	.562	.375	18	.323	.585	2.5	9	.015	.060	69
<b>C056-H8</b>	.562	.375	18	.360	.650	2.5	10	.015	.060	62
<b>C056-H9</b>	.562	.375	18	.408	.715	2.5	11	.015	.060	59
<b>C062-L1</b>	.625	.450	6	.055	.180	2.5	3	.010	.058	48
<b>C062-L2</b>	.625	.450	6	.068	.240	2.5	4	.010	.058	35
<b>C062-L3</b>	.625	.450	6	.085	.300	2.5	5	.010	.058	28
<b>C062-L4</b>	.625	.450	6	.106	.360	2.5	6	.010	.058	24
<b>C062-L5</b>	.625	.450	6	.128	.420	2.5	7	.010	.058	21
<b>C062-L6</b>	.625	.450	6	.165	.540	2.5	9	.010	.058	16
<b>C062-L7</b>	.625	.450	6	.202	.660	2.5	11	.010	.058	13
<b>C062-L8</b>	.625	.450	6	.238	.780	2.5	13	.010	.058	11
<b>C062-M1</b>	.625	.450	12	.104	.180	3.5	3	.010	.058	158
<b>C062-M2</b>	.625	.450	12	.130	.240	3.5	4	.010	.058	109
<b>C062-M3</b>	.625	.450	12	.175	.300	3.5	5	.010	.058	96
<b>C062-M4</b>	.625	.450	12	.206	.360	3.5	6	.010	.058	78
<b>C062-M5</b>	.625	.450	12	.246	.420	3.5	7	.010	.058	69
<b>C062-M6</b>	.625	.450	12	.317	.540	3.5	9	.010	.058	54
<b>C062-M7</b>	.625	.450	12	.386	.660	3.5	11	.010	.058	44
<b>C062-M8</b>	.625	.450	12	.454	.780	3.5	13	.010	.058	37
<b>C062-H1</b>	.625	.450	20	.102	.180	3.5	3	.012	.060	256
<b>C062-H2</b>	.625	.450	20	.135	.240	3.5	4	.012	.060	190
<b>C062-H3</b>	.625	.450	20	.175	.300	3.5	5	.012	.060	160
<b>C062-H4</b>	.625	.450	20	.205	.360	3.5	6	.012	.060	129
<b>C062-H5</b>	.625	.450	20	.245	.420	3.5	7	.012	.060	114
<b>C062-H6</b>	.625	.450	20	.315	.540	3.5	9	.012	.060	89
<b>C062-H7</b>	.625	.450	20	.390	.660	3.5	11	.012	.060	74
<b>C062-H8</b>	.625	.450	20	.465	.780	3.5	13	.012	.060	63
<b>C075-L1</b>	.750	.550	7	.142	.250	3.5	3	.008	.071	65
<b>C075-L2</b>	.750	.550	7	.187	.333	3.5	4	.008	.071	48
<b>C075-L3</b>	.750	.550	7	.246	.417	3.5	5	.008	.071	41
<b>C075-L4</b>	.750	.550	7	.285	.500	3.5	6	.008	.071	33
<b>C075-L5</b>	.750	.550	7	.348	.583	3.5	7	.008	.071	30
<b>C075-L6</b>	.750	.550	7	.446	.750	3.5	9	.008	.071	23
<b>C075-L7</b>	.750	.550	7	.580	1.000	3.5	12	.008	.071	17
<b>C075-M1</b>	.750	.550	13	.159	.250	3.5	3	.010	.078	143
<b>C075-M2</b>	.750	.550	13	.203	.333	3.5	4	.010	.078	100
<b>C075-M3</b>	.750	.550	13	.270	.417	3.5	5	.010	.078	88
<b>C075-M4</b>	.750	.550	13	.314	.500	3.5	6	.010	.078	70
<b>C075-M5</b>	.750	.550	13	.381	.583	3.5	7	.010	.078	64
<b>C075-M6</b>	.750	.550	13	.489	.750	3.5	9	.010	.078	50
<b>C075-M7</b>	.750	.550	13	.649	1.000	3.5	12	.010	.078	37
<b>C075-H1</b>	.750	.550	22	.169	.250	3.5	3	.013	.079	272
<b>C075-H2</b>	.750	.550	22	.215	.333	3.5	4	.013	.079	186
<b>C075-H3</b>	.750	.550	22	.291	.417	3.5	5	.013	.079	175
<b>C075-H4</b>	.750	.550	22	.335	.500	3.5	6	.013	.079	133
<b>C075-H5</b>	.750	.550	22	.405	.583	3.5	7	.013	.079	124
<b>C075-H6</b>	.750	.550	22	.526	.750	3.5	9	.013	.079	98
<b>C075-H7</b>	.750	.550	22	.699	1.000	3.5	12	.013	.079	73

### Product Dimensions

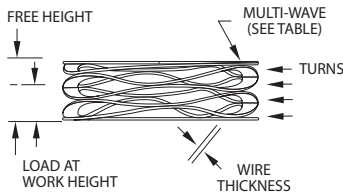
All dimensions in inches unless otherwise specified.



### Plain Ends



### Shim Ends



### Order Options

**C037-L1**

#### End options:

Plain ends . . . . . **C**  
 Squared-shim ends. . . . . **CS**

#### Material option:

Carbon Steel . . . . . **(blank)**  
 Stainless Steel . . . . . **-S17**

<sup>1</sup> Use "C" prefix for plain ends. Use "CS" prefix for squared-shim ends.

<sup>2</sup> Add suffix "-S17" for 17-7 stainless steel.

<sup>3</sup> Reference dimension.

<sup>4</sup> Theoretical dimension; measured in lb/in.

<sup>5</sup> See pages 126-127 for How to Order.

Stock Items in carbon steel and 17-7 PH/C stainless steel.

Smalley Part Number <sup>1,2,5</sup>	Operates in Bore Diameter	Clears Shaft Diameter	Load (lb)	Work Height	Free Height <sup>3</sup>	Number of Waves	Number of Turns	Thickness	Radial Wall	Spring Rate <sup>4</sup>
C087-L1	.875	.600	12	.117	.250	3.5	3	.010	.086	90
C087-L2	.875	.600	12	.158	.333	3.5	4	.010	.086	69
C087-L3	.875	.600	12	.207	.417	3.5	5	.010	.086	57
C087-L4	.875	.600	12	.242	.500	3.5	6	.010	.086	47
C087-L5	.875	.600	12	.287	.583	3.5	7	.010	.086	41
C087-L6	.875	.600	12	.378	.750	3.5	9	.010	.086	32
C087-L7	.875	.600	12	.498	1.000	3.5	12	.010	.086	24
C087-M1	.875	.600	18	.124	.250	3.5	3	.012	.094	148
C087-M2	.875	.600	18	.164	.333	3.5	4	.012	.094	108
C087-M3	.875	.600	18	.214	.417	3.5	5	.012	.094	89
C087-M4	.875	.600	18	.252	.500	3.5	6	.012	.094	76
C087-M5	.875	.600	18	.296	.583	3.5	7	.012	.094	66
C087-M6	.875	.600	18	.385	.750	3.5	9	.012	.094	50
C087-M7	.875	.600	18	.509	1.000	3.5	12	.012	.094	38
C087-H1	.875	.600	25	.166	.250	3.5	3	.015	.094	298
C087-H2	.875	.600	25	.214	.333	3.5	4	.015	.094	210
C087-H3	.875	.600	25	.278	.417	3.5	5	.015	.094	180
C087-H4	.875	.600	25	.327	.500	3.5	6	.015	.094	145
C087-H5	.875	.600	25	.395	.583	3.5	7	.015	.094	133
C087-H6	.875	.600	25	.510	.750	3.5	9	.015	.094	104
C087-H7	.875	.600	25	.670	1.000	3.5	12	.015	.094	78
C100-L1	1.000	.730	12	.084	.250	3.5	3	.010	.086	72
C100-L2	1.000	.730	12	.108	.333	3.5	4	.010	.086	53
C100-L3	1.000	.730	12	.145	.417	3.5	5	.010	.086	44
C100-L4	1.000	.730	12	.165	.500	3.5	6	.010	.086	36
C100-L5	1.000	.730	12	.201	.583	3.5	7	.010	.086	31
C100-L6	1.000	.730	12	.258	.750	3.5	9	.010	.086	24
C100-L7	1.000	.730	12	.342	1.000	3.5	12	.010	.086	18
C100-L8	1.000	.730	12	.445	1.250	3.5	15	.010	.086	15
C100-L9	1.000	.730	12	.519	1.500	3.5	18	.010	.086	12
C100-L10	1.000	.730	12	.633	1.750	3.5	21	.010	.086	11
C100-L11	1.000	.730	12	.710	2.000	3.5	24	.010	.086	9
C100-M1	1.000	.730	18	.087	.250	3.5	3	.012	.094	110
C100-M2	1.000	.730	18	.113	.333	3.5	4	.012	.094	82
C100-M3	1.000	.730	18	.148	.417	3.5	5	.012	.094	67
C100-M4	1.000	.730	18	.175	.500	3.5	6	.012	.094	55
C100-M5	1.000	.730	18	.212	.583	3.5	7	.012	.094	49
C100-M6	1.000	.730	18	.276	.750	3.5	9	.012	.094	38
C100-M7	1.000	.730	18	.360	1.000	3.5	12	.012	.094	28
C100-M8	1.000	.730	18	.452	1.250	3.5	15	.012	.094	23
C100-M9	1.000	.730	18	.549	1.500	3.5	18	.012	.094	19
C100-M10	1.000	.730	18	.650	1.750	3.5	21	.012	.094	16
C100-M11	1.000	.730	18	.720	2.000	3.5	24	.012	.094	14
C100-H1	1.000	.730	25	.131	.250	3.5	3	.015	.094	210
C100-H2	1.000	.730	25	.174	.333	3.5	4	.015	.094	157
C100-H3	1.000	.730	25	.227	.417	3.5	5	.015	.094	132
C100-H4	1.000	.730	25	.266	.500	3.5	6	.015	.094	107
C100-H5	1.000	.730	25	.319	.583	3.5	7	.015	.094	95
C100-H6	1.000	.730	25	.406	.750	3.5	9	.015	.094	73
C100-H7	1.000	.730	25	.541	1.000	3.5	12	.015	.094	54
C100-H8	1.000	.730	25	.688	1.250	3.5	15	.015	.094	45
C100-H9	1.000	.730	25	.813	1.500	3.5	18	.015	.094	36
C100-H10	1.000	.730	25	.957	1.750	3.5	21	.015	.094	32
C100-H11	1.000	.730	25	1.083	2.000	3.5	24	.015	.094	27

<sup>1</sup> Use "C" prefix for plain ends. Use "CS" prefix for squared-shim ends.

<sup>2</sup> Add suffix "-S17" for 17-7 stainless steel.

<sup>3</sup> Reference dimension.

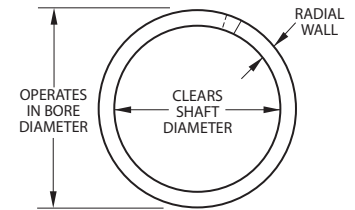
<sup>4</sup> Theoretical dimension; measured in lb/in.

<sup>5</sup> See pages 126-127 for How to Order.

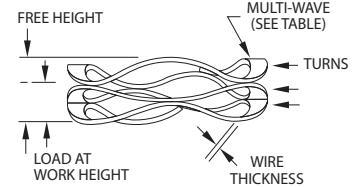


### Product Dimensions

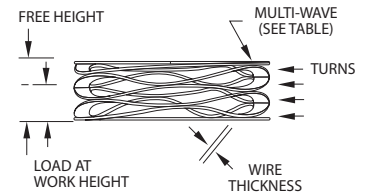
All dimensions in inches unless otherwise specified.



#### Plain Ends



#### Shim Ends



### Order Options

**C037-L1**

#### End options:

Plain ends . . . . .  C  
 Squared-shim ends. . . . .  CS

#### Material option:

Carbon Steel . . . . .  (blank)  
 Stainless Steel . . . . .  -S17

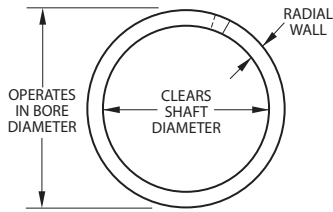


Stock Items in carbon steel and 17-7 PH/C stainless steel.

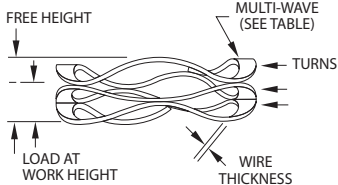
Smalley Part Number <sup>1,2,5</sup>	Operates in Bore Diameter	Clears Shaft Diameter	Load (lb)	Work Height	Free Height <sup>3</sup>	Number of Waves	Number of Turns	Thickness	Radial Wall	Spring Rate <sup>4</sup>
<b>C112-L1</b>	1.125	.850	12	.146	.300	3.5	3	.012	.094	78
<b>C112-L2</b>	1.125	.850	12	.186	.400	3.5	4	.012	.094	56
<b>C112-L3</b>	1.125	.850	12	.250	.500	3.5	5	.012	.094	48
<b>C112-L4</b>	1.125	.850	12	.295	.600	3.5	6	.012	.094	39
<b>C112-L5</b>	1.125	.850	12	.344	.700	3.5	7	.012	.094	34
<b>C112-L6</b>	1.125	.850	12	.392	.800	3.5	8	.012	.094	29
<b>C112-L7</b>	1.125	.850	12	.488	1.000	3.5	10	.012	.094	23
<b>C112-L8</b>	1.125	.850	12	.659	1.300	3.5	13	.012	.094	19
<b>C112-L9</b>	1.125	.850	12	.807	1.600	3.5	16	.012	.094	15
<b>C112-L10</b>	1.125	.850	12	1.017	2.000	3.5	20	.012	.094	12
<b>C112-M1</b>	1.125	.850	20	.160	.300	3.5	3	.015	.094	143
<b>C112-M2</b>	1.125	.850	20	.202	.400	3.5	4	.015	.094	101
<b>C112-M3</b>	1.125	.850	20	.270	.500	3.5	5	.015	.094	87
<b>C112-M4</b>	1.125	.850	20	.318	.600	3.5	6	.015	.094	71
<b>C112-M5</b>	1.125	.850	20	.381	.700	3.5	7	.015	.094	63
<b>C112-M6</b>	1.125	.850	20	.427	.800	3.5	8	.015	.094	54
<b>C112-M7</b>	1.125	.850	20	.536	1.000	3.5	10	.015	.094	43
<b>C112-M8</b>	1.125	.850	20	.708	1.300	3.5	13	.015	.094	34
<b>C112-M9</b>	1.125	.850	20	.861	1.600	3.5	16	.015	.094	27
<b>C112-M10</b>	1.125	.850	20	1.088	2.000	3.5	20	.015	.094	22
<b>C112-H1</b>	1.125	.850	30	.178	.300	3.5	3	.018	.094	246
<b>C112-H2</b>	1.125	.850	30	.229	.400	3.5	4	.018	.094	175
<b>C112-H3</b>	1.125	.850	30	.303	.500	3.5	5	.018	.094	152
<b>C112-H4</b>	1.125	.850	30	.350	.600	3.5	6	.018	.094	120
<b>C112-H5</b>	1.125	.850	30	.421	.700	3.5	7	.018	.094	108
<b>C112-H6</b>	1.125	.850	30	.470	.800	3.5	8	.018	.094	91
<b>C112-H7</b>	1.125	.850	30	.593	1.000	3.5	10	.018	.094	74
<b>C112-H8</b>	1.125	.850	30	.787	1.300	3.5	13	.018	.094	58
<b>C112-H9</b>	1.125	.850	30	.956	1.600	3.5	16	.018	.094	47
<b>C112-H10</b>	1.125	.850	30	1.202	2.000	3.5	20	.018	.094	38
<b>C125-L1</b>	1.250	1.000	12	.084	.300	3.5	3	.012	.094	56
<b>C125-L2</b>	1.250	1.000	12	.113	.400	3.5	4	.012	.094	42
<b>C125-L3</b>	1.250	1.000	12	.149	.500	3.5	5	.012	.094	34
<b>C125-L4</b>	1.250	1.000	12	.172	.600	3.5	6	.012	.094	28
<b>C125-L5</b>	1.250	1.000	12	.207	.700	3.5	7	.012	.094	24
<b>C125-L6</b>	1.250	1.000	12	.227	.800	3.5	8	.012	.094	21
<b>C125-L7</b>	1.250	1.000	12	.301	1.000	3.5	10	.012	.094	17
<b>C125-L8</b>	1.250	1.000	12	.395	1.300	3.5	13	.012	.094	13
<b>C125-L9</b>	1.250	1.000	12	.467	1.600	3.5	16	.012	.094	11
<b>C125-L10</b>	1.250	1.000	12	.591	2.000	3.5	20	.012	.094	9
<b>C125-M1</b>	1.250	1.000	20	.124	.300	3.5	3	.015	.094	114
<b>C125-M2</b>	1.250	1.000	20	.165	.400	3.5	4	.015	.094	85
<b>C125-M3</b>	1.250	1.000	20	.215	.500	3.5	5	.015	.094	70
<b>C125-M4</b>	1.250	1.000	20	.253	.600	3.5	6	.015	.094	58
<b>C125-M5</b>	1.250	1.000	20	.303	.700	3.5	7	.015	.094	50
<b>C125-M6</b>	1.250	1.000	20	.341	.800	3.5	8	.015	.094	44
<b>C125-M7</b>	1.250	1.000	20	.427	1.000	3.5	10	.015	.094	35
<b>C125-M8</b>	1.250	1.000	20	.577	1.300	3.5	13	.015	.094	28
<b>C125-M9</b>	1.250	1.000	20	.692	1.600	3.5	16	.015	.094	22
<b>C125-M10</b>	1.250	1.000	20	.866	2.000	3.5	20	.015	.094	18
<b>C125-H1</b>	1.250	1.000	30	.158	.300	3.5	3	.019	.094	210
<b>C125-H2</b>	1.250	1.000	30	.210	.400	3.5	4	.019	.094	158
<b>C125-H3</b>	1.250	1.000	30	.272	.500	3.5	5	.019	.094	132
<b>C125-H4</b>	1.250	1.000	30	.320	.600	3.5	6	.019	.094	107
<b>C125-H5</b>	1.250	1.000	30	.384	.700	3.5	7	.019	.094	95
<b>C125-H6</b>	1.250	1.000	30	.433	.800	3.5	8	.019	.094	82
<b>C125-H7</b>	1.250	1.000	30	.538	1.000	3.5	10	.019	.094	65
<b>C125-H8</b>	1.250	1.000	30	.717	1.300	3.5	13	.019	.094	51
<b>C125-H9</b>	1.250	1.000	30	.878	1.600	3.5	16	.019	.094	42
<b>C125-H10</b>	1.250	1.000	30	1.103	2.000	3.5	20	.019	.094	33

## Product Dimensions

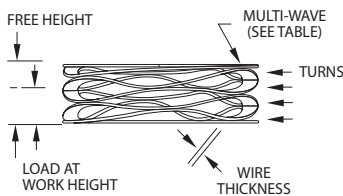
All dimensions in inches unless otherwise specified.



### Plain Ends



### Shim Ends



## Order Options

**C037-L1**

### End options:

Plain ends . . . . . **C**  
 Squared-shim ends. . . . . **CS**

### Material option:

Carbon Steel . . . . . **(blank)**  
 Stainless Steel . . . . . **-S17**

<sup>1</sup> Use "C" prefix for plain ends. Use "CS" prefix for squared-shim ends.

<sup>2</sup> Add suffix "-S17" for 17-7 stainless steel.

<sup>3</sup> Reference dimension.

<sup>4</sup> Theoretical dimension; measured in lb/in.

<sup>5</sup> See pages 126-127 for How to Order.

Stock Items in carbon steel and 17-7 PH/C stainless steel.

Smalley Part Number <sup>1,2,5</sup>	Operates in Bore Diameter	Clears Shaft Diameter	Load (lb)	Work Height	Free Height <sup>3</sup>	Number of Waves	Number of Turns	Thickness	Radial Wall	Spring Rate <sup>4</sup>
C137-L1	1.375	1.030	15	.075	.300	3.5	3	.012	.122	67
C137-L2	1.375	1.030	15	.099	.400	3.5	4	.012	.122	50
C137-L3	1.375	1.030	15	.129	.500	3.5	5	.012	.122	40
C137-L4	1.375	1.030	15	.155	.600	3.5	6	.012	.122	34
C137-L5	1.375	1.030	15	.179	.700	3.5	7	.012	.122	29
C137-L6	1.375	1.030	15	.206	.800	3.5	8	.012	.122	25
C137-L7	1.375	1.030	15	.256	1.000	3.5	10	.012	.122	20
C137-L8	1.375	1.030	15	.341	1.300	3.5	13	.012	.122	16
C137-L9	1.375	1.030	15	.424	1.600	3.5	16	.012	.122	13
C137-L10	1.375	1.030	15	.530	2.000	3.5	20	.012	.122	10
C137-M1	1.375	1.030	25	.142	.300	3.5	3	.016	.133	158
C137-M2	1.375	1.030	25	.186	.400	3.5	4	.016	.133	117
C137-M3	1.375	1.030	25	.240	.500	3.5	5	.016	.133	96
C137-M4	1.375	1.030	25	.281	.600	3.5	6	.016	.133	78
C137-M5	1.375	1.030	25	.340	.700	3.5	7	.016	.133	69
C137-M6	1.375	1.030	25	.384	.800	3.5	8	.016	.133	60
C137-M7	1.375	1.030	25	.486	1.000	3.5	10	.016	.133	49
C137-M8	1.375	1.030	25	.632	1.300	3.5	13	.016	.133	37
C137-M9	1.375	1.030	25	.788	1.600	3.5	16	.016	.133	31
C137-M10	1.375	1.030	25	.982	2.000	3.5	20	.016	.133	25
C137-H1	1.375	1.030	35	.149	.300	3.5	3	.018	.133	232
C137-H2	1.375	1.030	35	.189	.400	3.5	4	.018	.133	166
C137-H3	1.375	1.030	35	.247	.500	3.5	5	.018	.133	138
C137-H4	1.375	1.030	35	.287	.600	3.5	6	.018	.133	112
C137-H5	1.375	1.030	35	.343	.700	3.5	7	.018	.133	98
C137-H6	1.375	1.030	35	.390	.800	3.5	8	.018	.133	85
C137-H7	1.375	1.030	35	.490	1.000	3.5	10	.018	.133	69
C137-H8	1.375	1.030	35	.646	1.300	3.5	13	.018	.133	54
C137-H9	1.375	1.030	35	.793	1.600	3.5	16	.018	.133	43
C137-H10	1.375	1.030	35	1.000	2.000	3.5	20	.018	.133	35
C150-L1	1.500	1.140	20	.129	.300	3.5	3	.016	.133	117
C150-L2	1.500	1.140	20	.164	.400	3.5	4	.016	.133	85
C150-L3	1.500	1.140	20	.213	.500	3.5	5	.016	.133	70
C150-L4	1.500	1.140	20	.247	.600	3.5	6	.016	.133	57
C150-L5	1.500	1.140	20	.301	.700	3.5	7	.016	.133	50
C150-L6	1.500	1.140	20	.337	.800	3.5	8	.016	.133	43
C150-L7	1.500	1.140	20	.430	1.000	3.5	10	.016	.133	35
C150-L8	1.500	1.140	20	.565	1.300	3.5	13	.016	.133	27
C150-L9	1.500	1.140	20	.694	1.600	3.5	16	.016	.133	22
C150-L10	1.500	1.140	20	.866	2.000	3.5	20	.016	.133	18
C150-M1	1.500	1.140	35	.122	.300	3.5	3	.018	.133	197
C150-M2	1.500	1.140	35	.158	.400	3.5	4	.018	.133	145
C150-M3	1.500	1.140	35	.206	.500	3.5	5	.018	.133	119
C150-M4	1.500	1.140	35	.241	.600	3.5	6	.018	.133	97
C150-M5	1.500	1.140	35	.291	.700	3.5	7	.018	.133	86
C150-M6	1.500	1.140	35	.324	.800	3.5	8	.018	.133	74
C150-M7	1.500	1.140	35	.409	1.000	3.5	10	.018	.133	59
C150-M8	1.500	1.140	35	.540	1.300	3.5	13	.018	.133	46
C150-M9	1.500	1.140	35	.657	1.600	3.5	16	.018	.133	37
C150-M10	1.500	1.140	35	.835	2.000	3.5	20	.018	.133	30
C150-H1	1.500	1.140	60	.166	.300	4.5	3	.018	.133	448
C150-H2	1.500	1.140	60	.216	.400	4.5	4	.018	.133	326
C150-H3	1.500	1.140	60	.278	.500	4.5	5	.018	.133	270
C150-H4	1.500	1.140	60	.329	.600	4.5	6	.018	.133	221
C150-H5	1.500	1.140	60	.390	.700	4.5	7	.018	.133	194
C150-H6	1.500	1.140	60	.443	.800	4.5	8	.018	.133	168
C150-H7	1.500	1.140	60	.555	1.000	4.5	10	.018	.133	135
C150-H8	1.500	1.140	60	.726	1.300	4.5	13	.018	.133	105
C150-H9	1.500	1.140	60	.890	1.600	4.5	16	.018	.133	85
C150-H10	1.500	1.140	60	1.119	2.000	4.5	20	.018	.133	68

<sup>1</sup> Use "C" prefix for plain ends. Use "CS" prefix for squared-shim ends.

<sup>2</sup> Add suffix "-S17" for 17-7 stainless steel.

<sup>3</sup> Reference dimension.

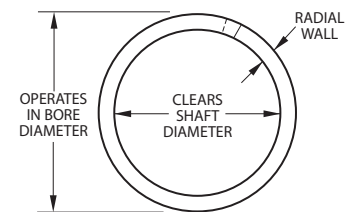
<sup>4</sup> Theoretical dimension; measured in lb/in.

<sup>5</sup> See pages 126-127 for How to Order.

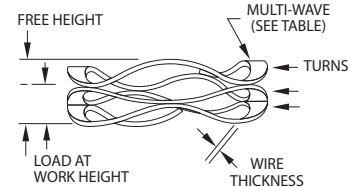


### Product Dimensions

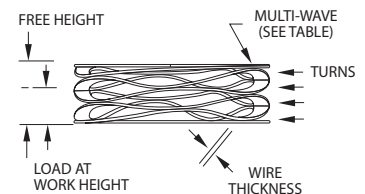
All dimensions in inches unless otherwise specified.



#### Plain Ends



#### Shim Ends



### Order Options

**C037-L1**

**End options:**  
 Plain ends . . . . .  C  
 Squared-shim ends . . . . .  CS

**Material option:**  
 Carbon Steel . . . . .  (blank)  
 Stainless Steel . . . . .  -S17

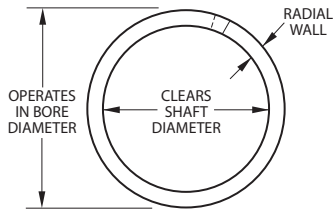


Stock Items in carbon steel and 17-7 PH/C stainless steel.

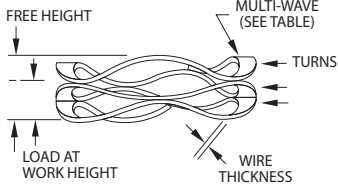
Smalley Part Number <sup>1,2,5</sup>	Operates in Bore Diameter	Clears Shaft Diameter	Load (lb)	Work Height	Free Height <sup>3</sup>	Number of Waves	Number of Turns	Thickness	Radial Wall	Spring Rate <sup>4</sup>
<b>C175-L1</b>	1.750	1.340	25	.155	.375	3.5	3	.018	.143	114
<b>C175-L2</b>	1.750	1.340	25	.200	.500	3.5	4	.018	.143	83
<b>C175-L3</b>	1.750	1.340	25	.265	.625	3.5	5	.018	.143	69
<b>C175-L4</b>	1.750	1.340	25	.310	.750	3.5	6	.018	.143	57
<b>C175-L5</b>	1.750	1.340	25	.367	.870	3.5	7	.018	.143	50
<b>C175-L6</b>	1.750	1.340	25	.415	1.000	3.5	8	.018	.143	43
<b>C175-L7</b>	1.750	1.340	25	.523	1.250	3.5	10	.018	.143	34
<b>C175-L8</b>	1.750	1.340	25	.638	1.500	3.5	12	.018	.143	29
<b>C175-L9</b>	1.750	1.340	25	.737	1.750	3.5	14	.018	.143	25
<b>C175-L10</b>	1.750	1.340	25	.844	2.000	3.5	16	.018	.143	22
<b>C175-M1</b>	1.750	1.340	50	.188	.375	4.5	3	.018	.143	267
<b>C175-M2</b>	1.750	1.340	50	.244	.500	4.5	4	.018	.143	195
<b>C175-M3</b>	1.750	1.340	50	.315	.625	4.5	5	.018	.143	161
<b>C175-M4</b>	1.750	1.340	50	.374	.750	4.5	6	.018	.143	133
<b>C175-M5</b>	1.750	1.340	50	.452	.870	4.5	7	.018	.143	120
<b>C175-M6</b>	1.750	1.340	50	.505	1.000	4.5	8	.018	.143	101
<b>C175-M7</b>	1.750	1.340	50	.629	1.250	4.5	10	.018	.143	81
<b>C175-M8</b>	1.750	1.340	50	.768	1.500	4.5	12	.018	.143	68
<b>C175-M9</b>	1.750	1.340	50	.899	1.750	4.5	14	.018	.143	59
<b>C175-M10</b>	1.750	1.340	50	1.026	2.000	4.5	16	.018	.143	51
<b>C175-H1</b>	1.750	1.340	90	.232	.375	4.5	3	.024	.148	629
<b>C175-H2</b>	1.750	1.340	90	.314	.500	4.5	4	.024	.148	484
<b>C175-H3</b>	1.750	1.340	90	.409	.625	4.5	5	.024	.148	417
<b>C175-H4</b>	1.750	1.340	90	.482	.750	4.5	6	.024	.148	336
<b>C175-H5</b>	1.750	1.340	90	.577	.870	4.5	7	.024	.148	307
<b>C175-H6</b>	1.750	1.340	90	.651	1.000	4.5	8	.024	.148	258
<b>C175-H7</b>	1.750	1.340	90	.813	1.250	4.5	10	.024	.148	206
<b>C175-H8</b>	1.750	1.340	90	.980	1.500	4.5	12	.024	.148	173
<b>C175-H9</b>	1.750	1.340	90	1.147	1.750	4.5	14	.024	.148	149
<b>C175-H10</b>	1.750	1.340	90	1.317	2.000	4.5	16	.024	.148	132
<b>C200-L1</b>	2.000	1.600	25	.094	.375	3.5	3	.018	.143	89
<b>C200-L2</b>	2.000	1.600	25	.120	.500	3.5	4	.018	.143	66
<b>C200-L3</b>	2.000	1.600	25	.158	.625	3.5	5	.018	.143	54
<b>C200-L4</b>	2.000	1.600	25	.179	.750	3.5	6	.018	.143	44
<b>C200-L5</b>	2.000	1.600	25	.217	.870	3.5	7	.018	.143	38
<b>C200-L6</b>	2.000	1.600	25	.243	1.000	3.5	8	.018	.143	33
<b>C200-L7</b>	2.000	1.600	25	.306	1.250	3.5	10	.018	.143	26
<b>C200-L8</b>	2.000	1.600	25	.365	1.500	3.5	12	.018	.143	22
<b>C200-L9</b>	2.000	1.600	25	.433	1.750	3.5	14	.018	.143	19
<b>C200-L10</b>	2.000	1.600	25	.490	2.000	3.5	16	.018	.143	17
<b>C200-M1</b>	2.000	1.600	50	.140	.375	4.5	3	.018	.143	213
<b>C200-M2</b>	2.000	1.600	50	.184	.500	4.5	4	.018	.143	158
<b>C200-M3</b>	2.000	1.600	50	.245	.625	4.5	5	.018	.143	132
<b>C200-M4</b>	2.000	1.600	50	.278	.750	4.5	6	.018	.143	106
<b>C200-M5</b>	2.000	1.600	50	.345	.870	4.5	7	.018	.143	95
<b>C200-M6</b>	2.000	1.600	50	.395	1.000	4.5	8	.018	.143	83
<b>C200-M7</b>	2.000	1.600	50	.498	1.250	4.5	10	.018	.143	66
<b>C200-M8</b>	2.000	1.600	50	.593	1.500	4.5	12	.018	.143	55
<b>C200-M9</b>	2.000	1.600	50	.694	1.750	4.5	14	.018	.143	47
<b>C200-M10</b>	2.000	1.600	50	.800	2.000	4.5	16	.018	.143	42
<b>C200-H1</b>	2.000	1.600	90	.197	.375	4.5	3	.024	.148	506
<b>C200-H2</b>	2.000	1.600	90	.258	.500	4.5	4	.024	.148	372
<b>C200-H3</b>	2.000	1.600	90	.332	.625	4.5	5	.024	.148	307
<b>C200-H4</b>	2.000	1.600	90	.389	.750	4.5	6	.024	.148	249
<b>C200-H5</b>	2.000	1.600	90	.465	.870	4.5	7	.024	.148	222
<b>C200-H6</b>	2.000	1.600	90	.525	1.000	4.5	8	.024	.148	189
<b>C200-H7</b>	2.000	1.600	90	.661	1.250	4.5	10	.024	.148	153
<b>C200-H8</b>	2.000	1.600	90	.781	1.500	4.5	12	.024	.148	125
<b>C200-H9</b>	2.000	1.600	90	.941	1.750	4.5	14	.024	.148	111
<b>C200-H10</b>	2.000	1.600	90	1.069	2.000	4.5	16	.024	.148	97

### Product Dimensions

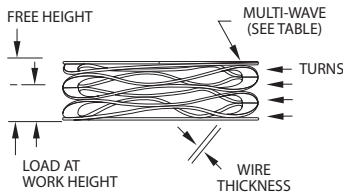
All dimensions in inches unless otherwise specified.



### Plain Ends



### Shim Ends



### Order Options

**C037-L1**

#### End options:

Plain ends . . . . . **C**  
 Squared-shim ends. . . . . **CS**

#### Material option:

Carbon Steel . . . . . (blank)  
 Stainless Steel . . . . . **-S17**

<sup>1</sup> Use "C" prefix for plain ends. Use "CS" prefix for squared-shim ends.

<sup>2</sup> Add suffix "-S17" for 17-7 stainless steel.

<sup>3</sup> Reference dimension.

<sup>4</sup> Theoretical dimension; measured in lb/in.

<sup>5</sup> See pages 126-127 for How to Order.