

# Compression Spring ▶ Stainless Steel Type with Inner Diameter as Reference



Please order according to the diagram

①~③ Select the type and parameters in the order of for ordering.

Model (①Code)

BYNUM

②D

D5

③L

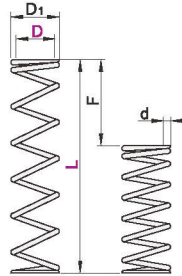
L30



Discounted Price  
Quantity 1~9 10~  
Price 100% Separate Quotation



CAD 2D 3D



| Code  | Type                                                  | Material      |                     | Allowable Displacement | Tolerance of Spring Constant |
|-------|-------------------------------------------------------|---------------|---------------------|------------------------|------------------------------|
|       |                                                       | International | Equivalent          |                        |                              |
| BYNUM | Stainless Steel Type with Inner Diameter as Reference | Standard Type | 0Cr18Ni9 SUS304-WPB | L×35%<br>L×40%         | ±10%                         |

■ D Dimension Tolerance ■ L Dimension Tolerance

| D                        | L                            |
|--------------------------|------------------------------|
| 8 or higher<br>10 Below  | +0.6<br>+0.1<br>+0.8<br>+0.1 |
| 50 or higher<br>60 Below | ±1<br>±2                     |

■ Features: Round wire coil spring with inner diameter as the reference.  
When the inner diameters are the same, the load remains constant.

① The compressed length is a reference value and may vary due to different production batches.

② Usage Life: 1 million cycles.

③ Grinding is performed on both ends

■ Allowable Displacement Fmax=L x 35%

| Code  | Model | D   | L    | D1   | d    | Compressed Length | Fmax   | Allowable Load Nmax | Spring Constant N/mm |
|-------|-------|-----|------|------|------|-------------------|--------|---------------------|----------------------|
| BYNUM | 5     | 15* | 6.6  | 0.80 | 6.8  | 5.3               | 15.39  | 2.90                |                      |
|       |       | 20* | 6.8  | 0.90 | 11.7 | 7.0               | 20.58  | 2.94                |                      |
|       |       | 25  |      |      |      | 8.8               | 25.68  | 2.92                |                      |
|       |       | 30  | 7.0  | 1.00 | 14.5 | 10.5              | 30.87  | 2.94                |                      |
|       |       | 35  |      |      |      | 12.3              | 35.97  | 2.92                |                      |
|       |       | 40* |      |      |      | 14.0              | 41.16  | 2.94                |                      |
|       | 6     | 45  | 7.2  | 1.10 | 22.0 | 15.8              | 46.26  | 2.93                |                      |
|       |       | 50  |      |      |      | 17.5              | 51.45  | 2.94                |                      |
|       |       | 15* | 7.8  | 0.90 | 7.7  | 5.3               | 15.39  | 2.90                |                      |
|       |       | 20* |      |      |      | 7.0               | 20.58  | 2.94                |                      |
|       |       | 25* |      |      |      | 8.8               | 25.68  | 2.92                |                      |
|       |       | 30* | 8.0  | 1.00 | 11.0 | 10.5              | 30.87  | 2.94                |                      |
|       | 8     | 35* |      |      |      | 12.3              | 35.97  | 2.92                |                      |
|       |       | 40  | 8.4  | 1.20 | 21.0 | 14.0              | 41.16  | 2.94                |                      |
|       |       | 45  |      |      |      | 15.8              | 46.26  | 2.93                |                      |
|       |       | 50  |      |      |      | 17.5              | 51.45  | 2.94                |                      |
|       |       | 55  | 8.6  | 1.30 | 29.9 | 19.3              | 56.55  | 2.93                |                      |
|       |       | 60  |      |      |      | 21.0              | 61.74  | 2.94                |                      |
|       | 10    | 20* | 10.2 | 1.10 | 8.8  | 7.0               | 20.58  | 2.94                |                      |
|       |       | 25* |      |      |      | 8.8               | 25.68  | 2.92                |                      |
|       |       | 30* |      |      |      | 10.5              | 30.87  | 2.94                |                      |
|       |       | 35* | 10.6 | 1.30 | 15.6 | 12.3              | 35.97  | 2.92                |                      |
|       |       | 40  |      |      |      | 14.0              | 41.16  | 2.94                |                      |
|       |       | 45  |      |      |      | 15.8              | 46.26  | 2.93                |                      |
|       | 12    | 50  |      |      |      | 17.5              | 51.45  | 2.94                |                      |
|       |       | 55  |      |      |      | 19.3              | 56.55  | 2.93                |                      |
|       |       | 60  | 11.0 | 1.50 | 27.8 | 21.0              | 61.74  | 2.94                |                      |
|       |       | 65  |      |      |      | 22.8              | 66.84  | 2.93                |                      |
|       |       | 70  |      |      |      | 24.5              | 72.03  | 2.94                |                      |
|       |       | 80  | 12.4 | 1.20 | 8.4  | 7.0               | 20.58  | 2.94                |                      |
|       | 16    | 25* |      |      |      | 8.8               | 25.68  | 2.92                |                      |
|       |       | 30* | 12.6 | 1.30 | 10.4 | 10.5              | 30.87  | 2.94                |                      |
|       |       | 35* |      |      |      | 12.3              | 35.97  | 2.92                |                      |
|       |       | 40  |      |      |      | 14.0              | 41.16  | 2.94                |                      |
|       |       | 45  |      |      |      | 15.8              | 46.26  | 2.93                |                      |
|       |       | 50  | 13.0 | 1.50 | 18.8 | 17.5              | 51.45  | 2.94                |                      |
|       | 20    | 55  |      |      |      | 19.3              | 56.55  | 2.93                |                      |
|       |       | 60  |      |      |      | 21.0              | 61.74  | 2.94                |                      |
|       |       | 65  | 13.4 | 1.70 | 28.9 | 22.8              | 66.84  | 2.93                |                      |
|       |       | 70  |      |      |      | 24.5              | 72.03  | 2.94                |                      |
|       |       | 80  |      |      |      | 28.0              | 82.32  | 2.94                |                      |
|       |       | 25* | 14.8 | 1.40 | 9.8  | 8.8               | 25.68  | 2.92                |                      |
|       | 24    | 30* |      |      |      | 10.5              | 30.87  | 2.94                |                      |
|       |       | 35  |      |      |      | 12.3              | 35.97  | 2.92                |                      |
|       |       | 40  | 15.2 | 1.60 | 16.0 | 14.0              | 41.16  | 2.94                |                      |
|       |       | 45  |      |      |      | 15.8              | 46.26  | 2.93                |                      |
|       |       | 50  |      |      |      | 17.5              | 51.45  | 2.94                |                      |
|       |       | 55  |      |      |      | 19.3              | 56.55  | 2.93                |                      |
|       | 28    | 60  | 15.6 | 1.80 | 23.4 | 21.0              | 61.74  | 2.94                |                      |
|       |       | 65  |      |      |      | 22.8              | 66.84  | 2.93                |                      |
|       |       | 70  |      |      |      | 24.5              | 72.03  | 2.94                |                      |
|       |       | 80  |      |      |      | 28.0              | 82.32  | 2.94                |                      |
|       |       | 90  |      |      |      | 31.5              | 92.61  | 2.94                |                      |
|       |       | 35* | 19.6 | 1.80 | 14.4 | 12.3              | 35.97  | 2.92                |                      |
|       | 32    | 40  |      |      |      | 14.0              | 41.16  | 2.94                |                      |
|       |       | 45  |      |      |      | 15.8              | 46.26  | 2.93                |                      |
|       |       | 50  |      |      |      | 17.5              | 51.45  | 2.94                |                      |
|       |       | 55  |      |      |      | 19.3              | 56.55  | 2.93                |                      |
|       |       | 60  | 20.4 | 2.20 | 28.6 | 21.0              | 61.74  | 2.94                |                      |
|       |       | 65  |      |      |      | 22.8              | 66.84  | 2.93                |                      |
|       | 36    | 70  |      |      |      | 24.5              | 72.03  | 2.94                |                      |
|       |       | 80  |      |      |      | 28.0              | 82.32  | 2.94                |                      |
|       |       | 90  |      |      |      | 31.5              | 92.61  | 2.94                |                      |
|       |       | 100 |      |      |      | 35.0              | 102.90 | 2.94                |                      |

■ Allowable Displacement Fmax=L x 40%

| Code  | Model | D   | L    | D1   | d    | Compressed Length | Fmax  | Allowable Load Nmax | Spring Constant N/mm |
|-------|-------|-----|------|------|------|-------------------|-------|---------------------|----------------------|
| BYNUL | 5     | 15* | 6.2  | 0.60 | 4.8  | 6                 | 5.88  |                     |                      |
|       |       | 20* |      |      |      | 8                 | 7.84  |                     |                      |
|       |       | 25  |      |      |      | 10                | 9.80  |                     |                      |
|       |       | 30  | 6.4  | 0.70 | 9.1  | 12                | 11.76 |                     |                      |
|       |       | 35  |      |      |      | 14                | 13.72 |                     |                      |
|       |       | 40  |      |      |      | 16                | 15.68 |                     |                      |
|       | 6     | 45  | 6.6  | 0.80 | 16.0 | 18                | 17.64 |                     |                      |
|       |       | 50  |      |      |      | 20                | 19.60 |                     |                      |
|       |       | 15* | 7.4  | 0.70 | 6.3  | 6                 | 5.88  |                     |                      |
|       |       | 20* |      |      |      | 8                 | 7.84  |                     |                      |
|       |       | 25* |      |      |      | 10                | 9.80  |                     |                      |
|       |       | 30* | 7.6  | 0.80 | 10.4 | 12                | 11.76 |                     |                      |
|       | 8     | 35* |      |      |      | 14                | 13.72 |                     |                      |
|       |       | 40  |      |      |      | 16                | 15.68 |                     |                      |
|       |       | 45  |      |      |      | 18                | 17.64 |                     |                      |
|       |       | 50  | 7.8  | 0.90 | 16.2 | 20                | 19.60 |                     |                      |
|       |       | 55  |      |      |      | 22                | 21.56 |                     |                      |
|       |       | 60  |      |      |      | 24                | 23.52 |                     |                      |
|       | 10    | 20* | 9.8  | 0.90 | 9.5  | 8                 | 7.84  |                     |                      |
|       |       | 25* |      |      |      | 10                | 9.80  |                     |                      |
|       |       | 30  |      |      |      | 12                | 11.76 |                     |                      |
|       |       | 35* |      |      |      | 14                | 13.72 |                     |                      |
|       |       | 40* | 10.0 | 1.00 | 14.0 | 16                | 15.68 |                     |                      |
|       |       | 45  |      |      |      | 18                | 17.64 |                     |                      |
|       | 12    | 50  |      |      |      | 20                | 19.60 |                     |                      |
|       |       | 55  |      |      |      | 22                | 21.56 |                     |                      |
|       |       | 60  |      |      |      | 24                | 23.52 |                     |                      |
|       |       | 65  | 10.4 | 1.20 | 28.8 | 26                | 25.48 |                     |                      |
|       |       | 70  |      |      |      | 28                | 27.44 |                     |                      |
|       |       | 80  |      |      |      | 32                | 31.36 |                     |                      |
|       | 16    | 20* | 12.0 | 1.00 | 8.5  | 8                 | 7.84  |                     |                      |
|       |       | 25* |      |      |      | 10                | 9.80  |                     |                      |
|       |       | 30* |      |      |      | 12                | 11.76 |                     |                      |
|       |       | 35* |      |      |      | 14                | 13.72 |                     |                      |
|       |       | 40  | 12.2 | 1.10 | 12.7 | 16                | 15.68 |                     |                      |
|       |       | 45  |      |      |      | 18                | 17.64 |                     |                      |
|       | 20    | 50  |      |      |      | 20                | 19.60 |                     |                      |
|       |       | 55  |      |      |      | 22                | 21.56 |                     |                      |
|       |       | 60  |      |      |      | 24                | 23.52 |                     |                      |
|       |       | 65  | 12.6 | 1.30 | 25.4 | 26                | 25.48 |                     |                      |
|       |       | 70  |      |      |      | 28                | 27.44 |                     |                      |
|       |       | 80  |      |      |      | 32                | 31.36 |                     |                      |
|       | 24    | 25* |      |      |      | 10                | 9.80  |                     |                      |
|       |       | 30* |      |      |      | 12                | 11.76 |                     |                      |
|       |       | 35* |      |      |      | 14                | 13.72 |                     |                      |
|       |       | 40  | 14.4 | 1.20 | 12.6 | 16                | 15.68 |                     |                      |
|       |       | 45  |      |      |      | 18                | 17.64 |                     |                      |
|       |       | 50  |      |      |      | 20                | 19.60 |                     |                      |
|       | 28    | 55  |      |      |      | 22                | 21.56 |                     |                      |
|       |       | 60  |      |      |      | 24                | 23.52 |                     |                      |
|       |       | 65  | 14.8 | 1.40 | 21.7 | 26                | 25.48 |                     |                      |
|       |       | 70  |      |      |      | 28                | 27.44 |                     |                      |
|       |       | 80  |      |      |      | 32                | 31.36 |                     |                      |
|       |       | 90  |      |      |      | 36                | 35.28 |                     |                      |
|       | 32    | 35  |      |      |      | 14                | 13.72 |                     |                      |
|       |       | 40  | 19.0 | 1.50 | 15.8 | 16                | 15.68 |                     |                      |
|       |       | 45  |      |      |      | 18                | 17.64 |                     |                      |
|       |       | 50  |      |      |      | 20                | 19.60 |                     |                      |
|       |       | 55  |      |      |      | 22                | 21.56 |                     |                      |
|       |       | 60  |      |      |      | 24                | 23.52 |                     |                      |
|       | 36    | 65  |      |      |      | 26                | 25.48 |                     |                      |
|       |       | 70  | 19.4 | 1.70 | 24.7 | 28                | 27.44 |                     |                      |
|       |       | 80  |      |      |      | 32                | 31.36 |                     |                      |
|       |       | 90  |      |      |      | 36                | 35.28 |                     |                      |
|       |       | 100 |      |      |      | 40                | 39.20 |                     |                      |

① Allowable Displacement Fmax: Indicates the maximum length the spring is allowed to compress. Using the spring beyond this compression limit will result in shortened spring life.

① Allowable Load Nmax: Denotes the load in Newtons (N) that corresponds to compressing the spring to Fmax.  
② Spring Constant N/mm=(Nmax)/(Fmax).