



| 呼 称 | 外径 (mm) | 内径 (mm) | 自由長 (mm) | ばね定数 | | 自由長×40.0% 100万回 | | 自由長×45.0% 50万回 | | 自由長×50.0% 30万回 | |
|--------------|------------|------------|-------------|--------|----------|--------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
| | | | | (N/mm) | (kgf/mm) | たわみ (mm) | 荷 重 N [kgf] | たわみ (mm) | 荷 重 N [kgf] | たわみ (mm) | 荷 重 N [kgf] |
| | | | | | | | | | | | |
| TY 14.5 × 20 | 14.5 | 9.0 | 20 | 18.52 | { 1.89 } | 8.0 | 147.1 {15.0} | 9.0 | 166.7 {17.0} | 10.0 | 186.3 {19.0} |
| 25 | | | 25 | 14.82 | { 1.51 } | 10.0 | | 11.3 | | 12.5 | |
| 30 | | | 30 | 12.35 | { 1.26 } | 12.0 | | 13.5 | | 15.0 | |
| 35 | | | 35 | 10.58 | { 1.08 } | 14.0 | | 15.8 | | 17.5 | |
| 40 | | | 40 | 9.26 | { 0.94 } | 16.0 | | 18.0 | | 20.0 | |
| 45 | | | 45 | 8.23 | { 0.84 } | 18.0 | | 20.3 | | 22.5 | |
| 50 | | | 50 | 7.41 | { 0.76 } | 20.0 | | 22.5 | | 25.0 | |
| 55 | | | 55 | 6.74 | { 0.69 } | 22.0 | | 24.8 | | 27.5 | |
| 60 | | | 60 | 6.17 | { 0.63 } | 24.0 | | 27.0 | | 30.0 | |
| 65 | | | 65 | 5.70 | { 0.58 } | 26.0 | | 29.3 | | 32.5 | |
| 70 | | | 70 | 5.29 | { 0.54 } | 28.0 | | 31.5 | | 35.0 | |
| 75 | | | 75 | 4.94 | { 0.50 } | 30.0 | | 33.8 | | 37.5 | |
| 80 | | | 80 | 4.63 | { 0.47 } | 32.0 | | 36.0 | | 40.0 | |
| 90 | | | 90 | 4.12 | { 0.42 } | 36.0 | | 40.5 | | 45.0 | |
| 100 | | | 100 | 3.70 | { 0.38 } | 40.0 | | 45.0 | | 50.0 | |
| 125 | 125 | 2.96 | { 0.30 } | 50.0 | 56.3 | 62.5 | | | | | |
| TY 17 × 25 | 17.0 | 11.0 | 25 | 21.80 | { 2.22 } | 10.0 | 215.7 {22.0} | 11.3 | 245.2 {25.0} | 12.5 | 274.6 {28.0} |
| 30 | | | 30 | 18.16 | { 1.85 } | 12.0 | | 13.5 | | 15.0 | |
| 35 | | | 35 | 15.57 | { 1.59 } | 14.0 | | 15.8 | | 17.5 | |
| 40 | | | 40 | 13.62 | { 1.39 } | 16.0 | | 18.0 | | 20.0 | |
| 45 | | | 45 | 12.11 | { 1.23 } | 18.0 | | 20.3 | | 22.5 | |
| 50 | | | 50 | 10.90 | { 1.11 } | 20.0 | | 22.5 | | 25.0 | |
| 55 | | | 55 | 9.91 | { 1.01 } | 22.0 | | 24.8 | | 27.5 | |
| 60 | | | 60 | 9.08 | { 0.93 } | 24.0 | | 27.0 | | 30.0 | |
| 65 | | | 65 | 8.38 | { 0.85 } | 26.0 | | 29.3 | | 32.5 | |
| 70 | | | 70 | 7.78 | { 0.79 } | 28.0 | | 31.5 | | 35.0 | |
| 75 | | | 75 | 7.27 | { 0.74 } | 30.0 | | 33.8 | | 37.5 | |
| 80 | | | 80 | 6.81 | { 0.69 } | 32.0 | | 36.0 | | 40.0 | |
| 90 | | | 90 | 6.05 | { 0.62 } | 36.0 | | 40.5 | | 45.0 | |
| 100 | | | 100 | 5.45 | { 0.56 } | 40.0 | | 45.0 | | 50.0 | |
| 125 | | | 125 | 4.36 | { 0.44 } | 50.0 | | 56.3 | | 62.5 | |
| 150 | 150 | 3.63 | { 0.37 } | 60.0 | 67.5 | 75.0 | | | | | |

1N = 0.102 Kgf

荷重(N) = ばね定数(N/mm) × たわみ(mm)

規格表

TY



| 呼称 | 外径 (mm) | 内径 (mm) | 自由長 (mm) | ばね定数 | | 自由長×40.0% 100万回 | | 自由長×45.0% 50万回 | | 自由長×50.0% 30万回 | |
|------------|------------|------------|-------------|--------|----------|--------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
| | | | | (N/mm) | (kgf/mm) | たわみ (mm) | 荷重 N [kgf] | たわみ (mm) | 荷重 N [kgf] | たわみ (mm) | 荷重 N [kgf] |
| TY 21 × 30 | 21.0 | 13.0 | 30 | 23.24 | { 2.37 } | 12.0 | 284.4 {29.0} | 13.5 | 313.8 {32.0} | 15.0 | 353.0 {36.0} |
| 35 | | | 35 | 19.92 | { 2.03 } | 14.0 | | 15.8 | | 17.5 | |
| 40 | | | 40 | 17.43 | { 1.78 } | 16.0 | | 18.0 | | 20.0 | |
| 45 | | | 45 | 15.50 | { 1.58 } | 18.0 | | 20.3 | | 22.5 | |
| 50 | | | 50 | 13.95 | { 1.42 } | 20.0 | | 22.5 | | 25.0 | |
| 55 | | | 55 | 12.68 | { 1.29 } | 22.0 | | 24.8 | | 27.5 | |
| 60 | | | 60 | 11.62 | { 1.19 } | 24.0 | | 27.0 | | 30.0 | |
| 65 | | | 65 | 10.73 | { 1.09 } | 26.0 | | 29.3 | | 32.5 | |
| 70 | | | 70 | 9.96 | { 1.02 } | 28.0 | | 31.5 | | 35.0 | |
| 75 | | | 75 | 9.30 | { 0.95 } | 30.0 | | 33.8 | | 37.5 | |
| 80 | | | 80 | 8.72 | { 0.89 } | 32.0 | | 36.0 | | 40.0 | |
| 90 | | | 90 | 7.75 | { 0.79 } | 36.0 | | 40.5 | | 45.0 | |
| 100 | | | 100 | 6.97 | { 0.71 } | 40.0 | | 45.0 | | 50.0 | |
| 125 | | | 125 | 5.58 | { 0.57 } | 50.0 | | 56.3 | | 62.5 | |
| 150 | | | 150 | 4.65 | { 0.47 } | 60.0 | | 67.5 | | 75.0 | |
| TY 26 × 30 | 26.0 | 16.5 | 30 | 34.87 | { 3.56 } | 12.0 | 411.9 {42.0} | 13.5 | 470.7 {48.0} | 15.0 | 519.8 {53.0} |
| 35 | | | 35 | 29.89 | { 3.05 } | 14.0 | | 15.8 | | 17.5 | |
| 40 | | | 40 | 26.15 | { 2.67 } | 16.0 | | 18.0 | | 20.0 | |
| 45 | | | 45 | 23.24 | { 2.37 } | 18.0 | | 20.3 | | 22.5 | |
| 50 | | | 50 | 20.92 | { 2.13 } | 20.0 | | 22.5 | | 25.0 | |
| 55 | | | 55 | 19.02 | { 1.94 } | 22.0 | | 24.8 | | 27.5 | |
| 60 | | | 60 | 17.43 | { 1.78 } | 24.0 | | 27.0 | | 30.0 | |
| 65 | | | 65 | 16.09 | { 1.64 } | 26.0 | | 29.3 | | 32.5 | |
| 70 | | | 70 | 14.94 | { 1.52 } | 28.0 | | 31.5 | | 35.0 | |
| 75 | | | 75 | 13.95 | { 1.42 } | 30.0 | | 33.8 | | 37.5 | |
| 80 | | | 80 | 13.08 | { 1.33 } | 32.0 | | 36.0 | | 40.0 | |
| 90 | | | 90 | 11.62 | { 1.19 } | 36.0 | | 40.5 | | 45.0 | |
| 100 | | | 100 | 10.46 | { 1.07 } | 40.0 | | 45.0 | | 50.0 | |
| 110 | | | 110 | 9.51 | { 0.97 } | 44.0 | | 49.5 | | 55.0 | |
| 125 | | | 125 | 8.37 | { 0.85 } | 50.0 | | 56.3 | | 62.5 | |
| 150 | | | 150 | 6.97 | { 0.71 } | 60.0 | | 67.5 | | 75.0 | |
| 175 | | | 175 | 5.98 | { 0.61 } | 70.0 | | 78.8 | | 87.5 | |
| 200 | 200 | 5.23 | { 0.53 } | 80.0 | 90.0 | 100.0 | | | | | |
| TY 32 × 40 | 32.0 | 21.0 | 40 | 34.87 | { 3.56 } | 16.0 | 559.0 {57.0} | 18.0 | 627.6 {64.0} | 20.0 | 696.3 {71.0} |
| 45 | | | 45 | 30.99 | { 3.16 } | 18.0 | | 20.3 | | 22.5 | |
| 50 | | | 50 | 27.89 | { 2.84 } | 20.0 | | 22.5 | | 25.0 | |
| 60 | | | 60 | 23.24 | { 2.37 } | 24.0 | | 27.0 | | 30.0 | |
| 70 | | | 70 | 19.92 | { 2.03 } | 28.0 | | 31.5 | | 35.0 | |
| 80 | | | 80 | 17.43 | { 1.78 } | 32.0 | | 36.0 | | 40.0 | |
| 90 | | | 90 | 15.50 | { 1.58 } | 36.0 | | 40.5 | | 45.0 | |
| 100 | | | 100 | 13.95 | { 1.42 } | 40.0 | | 45.0 | | 50.0 | |
| 110 | | | 110 | 12.68 | { 1.29 } | 44.0 | | 49.5 | | 55.0 | |
| 125 | | | 125 | 11.16 | { 1.14 } | 50.0 | | 56.3 | | 62.5 | |
| 150 | | | 150 | 9.30 | { 0.95 } | 60.0 | | 67.5 | | 75.0 | |
| 175 | | | 175 | 7.97 | { 0.81 } | 70.0 | | 78.8 | | 87.5 | |
| 200 | | | 200 | 6.97 | { 0.71 } | 80.0 | | 90.0 | | 100.0 | |
| 250 | | | 250 | 5.58 | { 0.57 } | 100.0 | | 112.5 | | 125.0 | |
| 300 | | | 300 | 4.65 | { 0.47 } | 120.0 | | 135.0 | | 150.0 | |

1N = 0.102 Kgf

荷重 (N) = ばね定数 (N/mm) × たわみ (mm)



| 呼 称 | 外径 (mm) | 内径 (mm) | 自由長 (mm) | ばね定数 | | 自由長×40.0% 100万回 | | 自由長×45.0% 50万回 | | 自由長×50.0% 30万回 | |
|------------|------------|------------|-------------|--------|----------|--------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
| | | | | (N/mm) | (kgf/mm) | たわみ (mm) | 荷 重 N {kgf} | たわみ (mm) | 荷 重 N {kgf} | たわみ (mm) | 荷 重 N {kgf} |
| | | | | | | | | | | | |
| TY 39 × 40 | 39.0 | 26.0 | 40 | 45.77 | { 4.67 } | 16.0 | 725.7 {74.0} | 18.0 | 823.8 {84.0} | 20.0 | 912.0 {93.0} |
| 45 | | | 45 | 40.68 | { 4.15 } | 18.0 | | 20.3 | | 22.5 | |
| 50 | | | 50 | 36.61 | { 3.73 } | 20.0 | | 22.5 | | 25.0 | |
| 60 | | | 60 | 30.51 | { 3.11 } | 24.0 | | 27.0 | | 30.0 | |
| 70 | | | 70 | 26.15 | { 2.67 } | 28.0 | | 31.5 | | 35.0 | |
| 80 | | | 80 | 22.88 | { 2.33 } | 32.0 | | 36.0 | | 40.0 | |
| 90 | | | 90 | 20.34 | { 2.07 } | 36.0 | | 40.5 | | 45.0 | |
| 100 | | | 100 | 18.31 | { 1.87 } | 40.0 | | 45.0 | | 50.0 | |
| 110 | | | 110 | 16.64 | { 1.70 } | 44.0 | | 49.5 | | 55.0 | |
| 125 | | | 125 | 14.65 | { 1.49 } | 50.0 | | 56.3 | | 62.5 | |
| 150 | | | 150 | 12.20 | { 1.24 } | 60.0 | | 67.5 | | 75.0 | |
| 175 | | | 175 | 10.46 | { 1.07 } | 70.0 | | 78.8 | | 87.5 | |
| 200 | | | 200 | 9.15 | { 0.93 } | 80.0 | | 90.0 | | 100.0 | |
| 250 | | | 250 | 7.32 | { 0.75 } | 100.0 | | 112.5 | | 125.0 | |
| 300 | | | 300 | 6.10 | { 0.62 } | 120.0 | | 135.0 | | 150.0 | |
| TY 46 × 50 | | | 46.0 | 32.0 | 50 | 48.81 | | { 4.98 } | | 20.0 | |
| 60 | 60 | 40.68 | | | { 4.15 } | 24.0 | 27.0 | 30.0 | | | |
| 70 | 70 | 34.87 | | | { 3.56 } | 28.0 | 31.5 | 35.0 | | | |
| 80 | 80 | 30.51 | | | { 3.11 } | 32.0 | 36.0 | 40.0 | | | |
| 90 | 90 | 27.12 | | | { 2.77 } | 36.0 | 40.5 | 45.0 | | | |
| 100 | 100 | 24.41 | | | { 2.49 } | 40.0 | 45.0 | 50.0 | | | |
| 110 | 110 | 22.19 | | | { 2.26 } | 44.0 | 49.5 | 55.0 | | | |
| 125 | 125 | 19.53 | | | { 1.99 } | 50.0 | 56.3 | 62.5 | | | |
| 150 | 150 | 16.27 | | | { 1.66 } | 60.0 | 67.5 | 75.0 | | | |
| 175 | 175 | 13.95 | | | { 1.42 } | 70.0 | 78.8 | 87.5 | | | |
| 200 | 200 | 12.20 | | | { 1.24 } | 80.0 | 90.0 | 100.0 | | | |
| 250 | 250 | 9.76 | | | { 1.00 } | 100.0 | 112.5 | 125.0 | | | |
| 300 | 300 | 8.14 | | | { 0.83 } | 120.0 | 135.0 | 150.0 | | | |

1N = 0.102 Kgf

荷重 (N) = ばね定数 (N/mm) × たわみ (mm)

規格表

TY