

圆线螺旋弹簧

-WY(75%压缩量)・WR(60%压缩量)-



Order 订货范例 Catalog No. WY 13-60



Delivery 交货期



库存品
隔日上海・广州发货 P.41
(17:00前订购的库存品可当日发货。)
数量≥501时, 请另询交货期。



Price 价格
询价联系方式:
WOS: <https://www.misumi-ec.com/cn/> P.57
TEL: 021-6710-8701 / FAX: 021-6710-8984 P.1663

WY: Fmax.(容许压缩量)=L×75%

| d | 压紧长度 | F max. | 负载 N(kgf) max. | Catalog No. Type D-L |
|------|------|--------|----------------|----------------------|
| 0.16 | 1.0 | 3.75 | 0.38(0.04) | WY 3-5 |
| 0.2 | 2.0 | 7.5 | 0.75(0.08) | 10 |
| 0.23 | 3.6 | 11.2 | 1.12(0.11) | 15 |
| 0.23 | 3.6 | 15 | 1.5(0.15) | 20 |
| 0.25 | 5.5 | 18.7 | 1.87(0.19) | 25 |
| 0.26 | 6.5 | 22.5 | 2.25(0.23) | 30 |
| 0.2 | 1.1 | 3.75 | 0.38(0.04) | WY 4-5 |
| 0.23 | 1.9 | 7.5 | 0.7(0.08) | 10 |
| 0.23 | 1.9 | 11.2 | 1.1(0.11) | 15 |
| 0.25 | 2.7 | 15 | 1.5(0.15) | 20 |
| 0.29 | 5 | 18.7 | 1.8(0.19) | 25 |
| 0.29 | 5 | 22.5 | 2.2(0.23) | 30 |
| 0.32 | 7.7 | 26.2 | 2.6(0.26) | 35 |
| 0.32 | 7.7 | 30 | 2.9(0.3) | 40 |
| 0.25 | 1.7 | 7.5 | 0.7(0.08) | WY 5-10 |
| 0.25 | 1.7 | 11.2 | 1.1(0.11) | 15 |
| 0.3 | 3.2 | 15 | 1.5(0.15) | 20 |
| 0.3 | 3.2 | 18.7 | 1.8(0.19) | 25 |
| 0.35 | 6.3 | 22.5 | 2.2(0.23) | 30 |
| 0.35 | 6.3 | 26.2 | 2.6(0.26) | 35 |
| 0.38 | 9.2 | 30 | 2.9(0.3) | 40 |
| 0.38 | 9.2 | 33.7 | 3.3(0.34) | 45 |
| 0.38 | 9.2 | 37.5 | 3.7(0.38) | 50 |
| 0.3 | 2.1 | 7.5 | 0.75(0.08) | WY 6-10 |
| 0.32 | 2.8 | 11.2 | 1.1(0.11) | 15 |
| 0.32 | 2.8 | 15 | 1.5(0.15) | 20 |
| 0.35 | 4.1 | 18.7 | 1.8(0.19) | 25 |
| 0.38 | 5.6 | 22.5 | 2.2(0.23) | 30 |
| 0.38 | 5.6 | 26.2 | 2.6(0.26) | 35 |
| 0.4 | 7.2 | 30 | 2.9(0.3) | 40 |
| 0.4 | 7.2 | 33.7 | 3.3(0.34) | 45 |
| 0.4 | 7.2 | 37.5 | 3.7(0.38) | 50 |
| 0.45 | 12.2 | 41.2 | 4.0(0.41) | 55 |
| 0.45 | 12.2 | 45 | 4.4(0.45) | 60 |
| 0.45 | 12.2 | 48.7 | 4.8(0.49) | 65 |
| 0.45 | 12.2 | 52.5 | 5.1(0.53) | 70 |

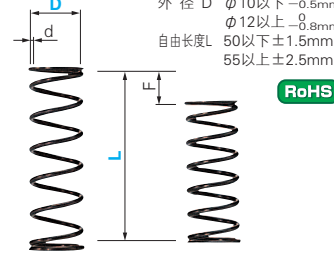
| d | 压紧长度 | F max. | 负载 N(kgf) max. | Catalog No. Type D-L |
|------|------|--------|----------------|----------------------|
| 0.35 | 2.1 | 7.5 | 0.75(0.08) | WY 8-10 |
| 0.38 | 3 | 11.2 | 1.1(0.11) | 15 |
| 0.4 | 3.5 | 15 | 1.5(0.15) | 20 |
| 0.4 | 3.5 | 18.7 | 1.8(0.19) | 25 |
| 0.45 | 5.7 | 22.5 | 2.2(0.23) | 30 |
| 0.45 | 5.7 | 26.2 | 2.6(0.26) | 35 |
| 0.45 | 5.7 | 30 | 2.9(0.3) | 40 |
| 0.45 | 5.7 | 33.7 | 3.3(0.34) | 45 |
| 0.5 | 9 | 37.5 | 3.7(0.38) | 50 |
| 0.5 | 9 | 41.2 | 4.0(0.41) | 55 |
| 0.5 | 9 | 45 | 4.4(0.45) | 60 |
| 0.5 | 9 | 48.7 | 4.8(0.49) | 65 |
| 0.5 | 9 | 52.5 | 5.1(0.53) | 70 |
| 0.5 | 3 | 11.2 | 2.26(0.23) | WY 10-15 |
| 0.55 | 4.6 | 15 | 2.9(0.3) | 20 |
| 0.55 | 4.6 | 18.7 | 3.7(0.37) | 25 |
| 0.6 | 6.6 | 22.5 | 4.4(0.45) | 30 |
| 0.6 | 6.6 | 26.2 | 5.1(0.52) | 35 |
| 0.65 | 9.1 | 30 | 5.9(0.6) | 40 |
| 0.65 | 9.1 | 33.7 | 6.6(0.67) | 45 |
| 0.65 | 9.1 | 37.5 | 7.4(0.75) | 50 |
| 0.65 | 9.1 | 41.2 | 8.1(0.82) | 55 |
| 0.7 | 12.6 | 45 | 8.8(0.9) | 60 |
| 0.7 | 12.6 | 48.7 | 9.6(0.97) | 65 |
| 0.7 | 12.6 | 52.5 | 10.3(1.05) | 70 |

| d | 压紧长度 | F max. | 负载 N(kgf) max. | Catalog No. Type D-L |
|------|------|--------|----------------|----------------------|
| 0.6 | 3.9 | 15 | 2.9(0.3) | WY 13-20 |
| 0.65 | 5.1 | 18.7 | 3.7(0.37) | 25 |
| 0.65 | 5.1 | 22.5 | 4.4(0.45) | 30 |
| 0.7 | 6.7 | 26.2 | 5.1(0.52) | 35 |
| 0.75 | 8.7 | 30 | 5.9(0.6) | 40 |
| 0.75 | 8.7 | 33.7 | 6.6(0.67) | 45 |
| 0.8 | 11.6 | 37.5 | 7.4(0.75) | 50 |
| 0.8 | 11.6 | 41.2 | 8.1(0.82) | 55 |
| 0.8 | 11.6 | 45 | 8.8(0.9) | 60 |
| 0.85 | 15.3 | 48.7 | 9.6(0.97) | 65 |
| 0.85 | 15.3 | 52.5 | 10.3(1.05) | 70 |
| 0.65 | 3.6 | 15 | 2.9(0.3) | WY 16-20 |
| 0.7 | 4.6 | 18.7 | 3.7(0.37) | 25 |
| 0.75 | 5.7 | 22.5 | 4.4(0.45) | 30 |
| 0.8 | 7 | 26.2 | 5.1(0.52) | 35 |
| 0.85 | 9 | 30 | 5.9(0.6) | 40 |
| 0.85 | 9 | 33.7 | 6.6(0.67) | 45 |
| 0.9 | 11.3 | 37.5 | 7.4(0.75) | 50 |
| 0.9 | 11.3 | 41.2 | 8.1(0.82) | 55 |
| 0.9 | 11.3 | 45 | 8.8(0.9) | 60 |
| 0.9 | 11.3 | 48.7 | 9.6(0.97) | 65 |
| 0.9 | 11.3 | 52.5 | 10.3(1.05) | 70 |

●负载的计算方法: 负载=弹簧常数×压缩量
(国际单位) $N=N/mm \times Fmm$
 $kgf=kgf/mm \times Fmm$
($kgf=N \times 0.101972$)

- WY型的两端面都未进行研磨。
- 压紧长度为参考值。并且会因生产批次不同而有一些偏差。
- 使用次数: 100万次
- 产品概要 P.1397
- 螺旋弹簧的使用方法与注意事项 P.1446

WY WR



弹簧常数 ±10%
外径 D φ10以下 -0.5mm
φ12以上 -0.8mm
自由长度L 50以下 ±1.5mm
55以上 ±2.5mm



材质 相当于SWP

| 弹簧常数 | WY | WR | WF | WL | WT | WM | WH | WB |
|------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| D | | | | | | | | |
| 2 | | | | 0.5(0.05) | | | | |
| 3 | | | | | 1.5(0.15) | | | |
| 4 | | | | | | 2.0(0.2) | | |
| 5 | | | | | | | 2.9(0.3) | |
| 6 | | | | | | | | 3.9(0.4) |
| 8 | | | | | | | | 4.9(0.5) |
| 10 | N/mm 0.1 (kgf/mm) {0.01} | N/mm 0.3 (kgf/mm) {0.03} | N/mm 0.5 (kgf/mm) {0.05} | N/mm 1.0 (kgf/mm) {0.1} | N/mm 2.0 (kgf/mm) {0.2} | N/mm 2.9 (kgf/mm) {0.3} | N/mm 5.9 (kgf/mm) {0.6} | N/mm 9.8 (kgf/mm) {1.0} |
| 12 | N/mm 0.2 (kgf/mm) {0.02} | N/mm 0.5 (kgf/mm) {0.05} | N/mm 1.0 (kgf/mm) {0.1} | N/mm 2.0 (kgf/mm) {0.2} | N/mm 2.9 (kgf/mm) {0.3} | N/mm 4.9 (kgf/mm) {0.5} | N/mm 9.8 (kgf/mm) {1.0} | N/mm 19.6 (kgf/mm) {2.0} |
| 13 | | | | | | | | 29.4(3.0) |
| 14 | | | | | | | | |
| 16 | | | | | | | | |
| 18 | | | | | | | | |
| 20 | | | | | | | | |
| 22 | | | | | | | | |
| 27 | | | | | | | | |

Fmax. F=L×75% F=L×60% F=L×45% F=L×40% F=L×40% F=L×40% F=L×35% F=L×30% F=L×25%

WR: Fmax.(容许压缩量)=L×60%

| d | 压紧长度 | F max. | 负载 N(kgf) max. | Catalog No. Type D-L |
|------|------|--------|----------------|----------------------|
| 0.23 | 1.8 | 3 | 0.9(0.09) | WR 3-5 |
| 0.25 | 2.3 | 6 | 1.8(0.18) | 10 |
| 0.3 | 4.8 | 9 | 2.6(0.27) | 15 |
| 0.3 | 4.8 | 12 | 3.5(0.36) | 20 |
| 0.32 | 6.8 | 15 | 4.4(0.45) | 25 |
| 0.32 | 6.8 | 18 | 5.3(0.54) | 30 |
| 0.35 | 11.5 | 21 | 6.2(0.63) | 35 |
| 0.35 | 11.5 | 24 | 7.1(0.72) | 40 |
| 0.26 | 1.6 | 3 | 0.9(0.09) | WR 4-5 |
| 0.29 | 2.2 | 6 | 1.8(0.18) | 10 |
| 0.32 | 3.2 | 9 | 2.6(0.27) | 15 |
| 0.38 | 6.5 | 12 | 3.5(0.36) | 20 |
| 0.38 | 6.5 | 15 | 4.4(0.45) | 25 |
| 0.4 | 8.4 | 18 | 5.3(0.54) | 30 |
| 0.4 | 8.4 | 21 | 6.2(0.63) | 35 |
| 0.45 | 15 | 24 | 7.1(0.72) | 40 |
| 0.45 | 15 | 27 | 7.9(0.81) | 45 |
| 0.45 | 15 | 30 | 8.8(0.9) | 50 |
| 0.45 | 15 | 33 | 9.7(0.99) | 55 |
| 0.5 | 23.5 | 36 | 10.6(1.08) | 60 |
| 0.5 | 25 | 39 | 11.5(1.17) | 65 |
| 0.5 | 25 | 42 | 12.4(1.26) | 70 |
| 0.3 | 1.6 | 3 | 0.9(0.09) | WR 5-5 |
| 0.35 | 1.6 | 6 | 1.8(0.18) | 10 |
| 0.35 | 2.8 | 9 | 2.6(0.27) | 15 |
| 0.4 | 4.8 | 12 | 3.5(0.36) | 20 |
| 0.45 | 8 | 15 | 4.4(0.45) | 25 |
| 0.45 | 8 | 18 | 5.3(0.54) | 30 |
| 0.5 | 12.5 | 21 | 6.2(0.63) | 35 |
| 0.5 | 12.5 | 24 | 7.1(0.72) | 40 |
| 0.55 | 17.6 | 27 | 7.9(0.81) | 45 |
| 0.55 | 18 | 30 | 8.8(0.9) | 50 |
| 0.55 | 20 | 33 | 9.7(0.99) | 55 |
| 0.55 | 20 | 36 | 10.6(1.08) | 60 |
| 0.55 | 20.9 | 39 | 11.5(1.2) | 65 |
| 0.55 | 20.9 | 42 | 12.4(1.3) | 70 |
| 0.32 | 1.6 | 3 | 0.9(0.09) | WR 6-5 |
| 0.4 | 3.2 | 6 | 1.8(0.18) | 10 |
| 0.4 | 3.2 | 9 | 2.6(0.27) | 15 |
| 0.5 | 7.5 | 12 | 3.5(0.36) | 20 |
| 0.5 | 7.5 | 15 | 4.4(0.45) | 25 |
| 0.5 | 7.5 | 18 | 5.3(0.54) | 30 |
| 0.55 | 11.5 | 21 | 6.2(0.63) | 35 |
| 0.55 | 11.5 | 24 | 7.1(0.72) | 40 |
| 0.6 | 17.4 | 27 | 7.9(0.81) | 45 |
| 0.6 | 17.4 | 30 | 8.8(0.9) | 50 |
| 0.6 | 17.4 | 33 | 9.7(0.99) | 55 |
| 0.6 | 17.4 | 36 | 10.6(1.08) | 60 |
| 0.6 | 17.4 | 39 | 11.5(1.17) | 65 |
| 0.6 | 17.4 | 42 | 12.4(1.26) | 70 |
| 0.65 | 27.3 | 48 | 14.1(1.4) | 80 |
| 0.45 | 2.7 | 6 | 1.8(0.18) | WR 8-10 |
| 0.5 | 4 | 9 | 2.6(0.27) | 15 |
| 0.5 | 4 | 12 | 3.5(0.36) | 20 |
| 0.55 | 5.8 | 15 | 4.4(0.45) | 25 |
| 0.6 | 8.4 | 18 | 5.3(0.54) | 30 |
| 0.6 | 8.4 | 21 | 6.2(0.63) | 35 |
| 0.6 | 8.4 | 24 | 7.1(0.72) | 40 |
| 0.7 | 16 | 27 | 7.9(0.81) | 45 |
| 0.7 | 16 | 30 | 8.8(0.9) | 50 |
| 0.7 | 16 | 33 | 9.7(0.99) | 55 |
| 0.7 | 16 | 36 | 10.6(1.08) | 60 |
| 0.7 | 16 | 39 | 11.5(1.17) | 65 |
| 0.7 | 16 | 42 | 12.4(1.26) | 70 |
| 0.75 | 22.9 | 48 | 14.1(1.4) | 80 |

●负载的计算方法: 负载=弹簧常数×压缩量
(国际单位) $N=N/mm \times Fmm$
 $kgf=kgf/mm \times Fmm$
($kgf=N \times 0.101972$)

- WR型的两端面都未进行研磨。
- 压紧长度为参考值。并且会因生产批次不同而有一些偏差。
- 使用次数: 100万次
- 产品概要 P.1397
- 螺旋弹簧的使用方法与注意事项 P.1446