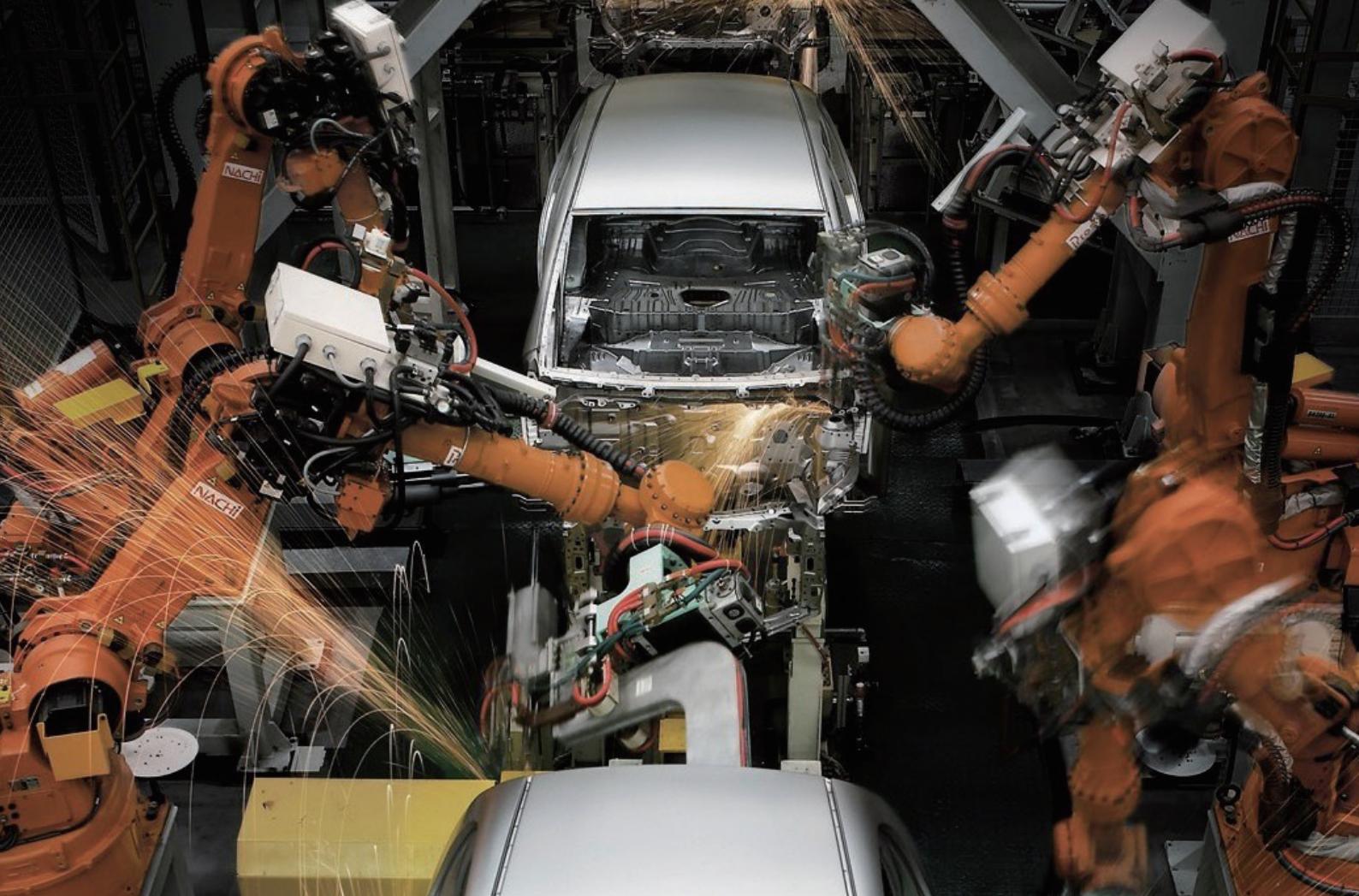




Energy Absorption
Vibration Control

Wire Rope Vibration Isolator





EKD

**FOCUSSES ON COST-EFFECTIVE ENERGY
ABSORPTION AND VIBRATION ISOLATION
SOLUTIONS.**

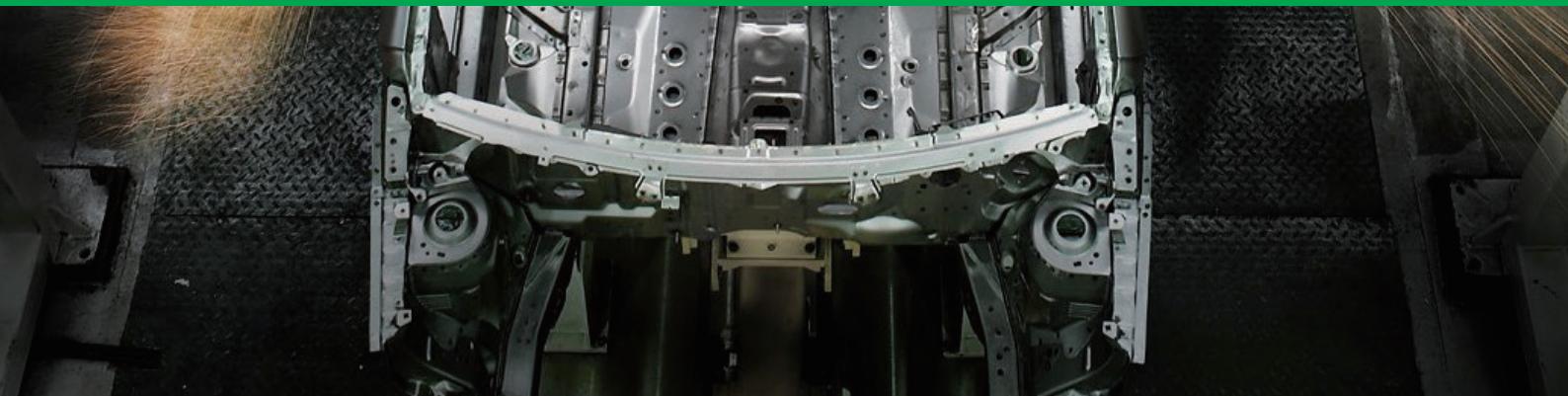


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Wire Rope Vibration Isolators



WR Series Wire Rope Vibration Isolators

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CR Series Compact Wire Rope Vibration Isolators

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**EXCELLENT IN QUALITY
AND VALUE FOR ENERGY
ABSORPTION AND VIBRATION
ISOLATION PRODUCTS**

BRAND PROFILE

Originating from American design and technology, EKD specializes in research and development, manufacture, testing and solutions of energy absorption and vibration control products like hydraulic shock absorbers, viscous dampers, wire rope vibration isolators, polyurethane cushions etc. R&D and manufacture are based in Wuxi, Jiangsu Province. Currently, EKD has 4 complete product lines and the leading product testing lab in the industry.

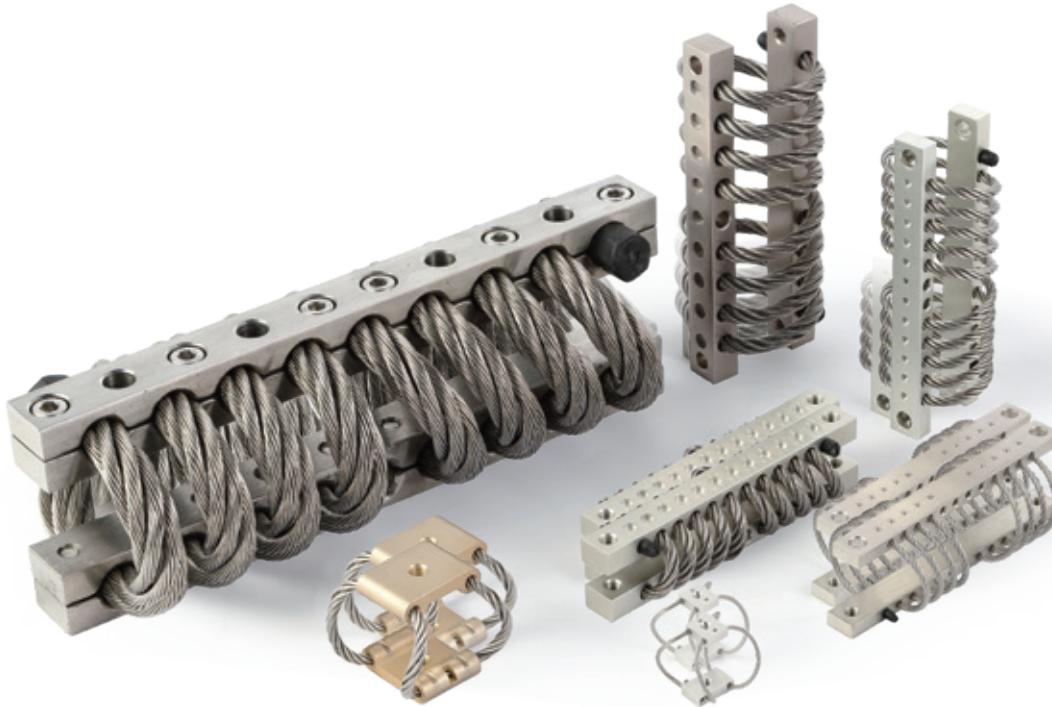
EKD product's differences and features:

- Leading product design in the world.
- All the key components use top brand products in the industry, more than 60% components are originally from US.
- Standardized assembly process.
- High precision, testing of whole series equipments, testing rate of finished products as high as 100%.

EKD's Brand Advantages:

- Excellent working life and performance.
- Prompt product delivery, enough safety inventories.
- Quick and good technical supports such as product sizing, product testing, and solutions.
- On-site service support from domestic professionals within 24 hours.





Features and Benefits

Standard Wire Rope Vibration Isolators are comprised of stainless steel stranded cable threaded through aluminum alloy retaining bars that are mounted for effective shock and vibration isolation.

With their corrosion resistant, all metal construction, EKD wire rope vibration isolators are environmentally stable, high-performance shock and vibration isolators that are

unaffected by chemicals, oil, ozone, abrasives and temperature extremes. Specially designed anti-vibration wire rope vibration isolator provides better performance and damping ratio based on clients' requirements, particularly suitable for high bearing capacity requirements and high shock applications. Distortion ratio can be as high as 70-80%. This series products are widely used in civil and military equipments.

Materials and Finishes:

- Standard:** Wire rope: Stainless steel 302 / 304
 Mount bars: Aluminum alloy surface (Anodized)
 Hardware: Alloy steel, Zinc Plated
 Thread: Stainless Steel Self Clinching Insert(WR2-WR8 Series),
 Threaded Bar(WR12-WR40 Series)
- Special:** HGGS Series all stainless steel products / HGGN Series anti-vibration high energy vibration isolators

Isolator Options:

- Mounting:** EKD offers a full range of mounting combinations of thru hole, countersunk and threaded bars.
- Loops:** EKD's wire rope vibration isolators can be purchased with the full number of loops, or as few as 2 loops. The number of loops is indicated in the isolator part number. Performance is provided for full loop isolators. Performance for reduced loop isolators can be obtained by a simple ratio.
- Bellmouth:** EKD's wire rope isolators are available with a "bellmouth" option. The bellmouth feature includes mount bars with radii manufactured into the wire rope hole edges. This option is recommended for high fatigue applications. Add an "R" to the end of the part number.

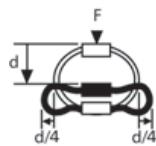
Performance:

Stiffness(KV or KS) :

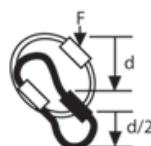
Wire rope vibration isolators exhibit non-linear stiffness behavior. Small deflections, usually associated with vibration isolation, will have a different spring rate than larger shock deflections. EKD company publishes typical vibration stiffness value(Kv), and average shock stiffness values(Ks) within the catalog. These values can be used with the provided equations listed later to predict system performance. The stiffness values listed in the catalog are for full-loop versions. For reduced loop versions, ratio the stiffness by dividing the number of desired loops by the number of full loops.

Isolator Axes:

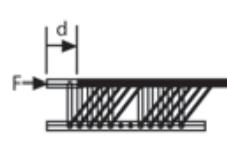
Wire Rope Vibration Isolators are multi-axis vibration isolators. The diagram below includes load axis definitions and deflection considerations.



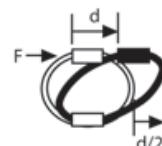
COMPRESSION



45° COMPRESSION/ ROLL



FIXED SHEAR

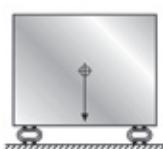


FIXED ROLL

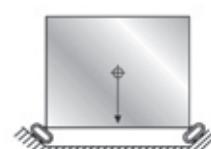
Damping: Typically 5-15%, depending on size and input level. The performance of HGGN Series anti-vibration high energy vibration isolator is significantly improved. For specific damping considerations, please consult EKD company.

Mounting Orientation:

The diagrams below illustrate typical mounting orientations.



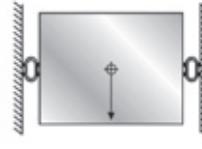
COMPRESSION



45° COMPRESSION/ ROLL



FIXED SHEAR

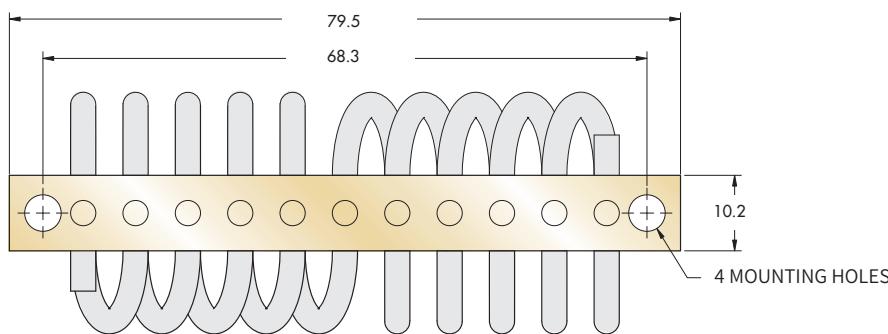


FIXED ROLL

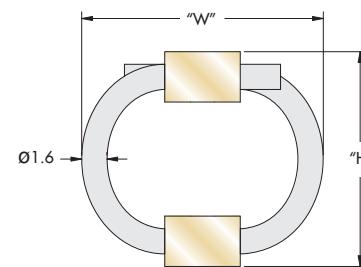
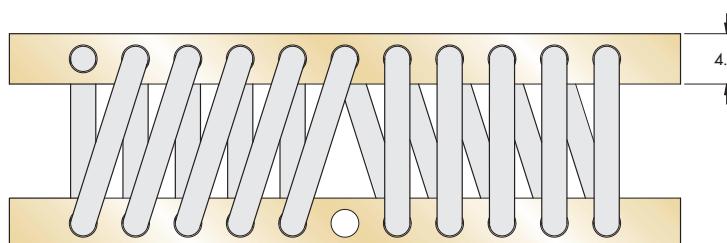
Stabilizer:

Stabilizers are used to control deflections of tall supported masses. Stabilizers are typically recommended when the height equals 2-times the width or depth dimension. In most applications, the quantity of stabilizers required is half as many as the base isolators, and select one size softer than the base isolators. Stabilizers are usually side mounted.

| Applications Worksheet | | METRIC |
|---|--|--|
| PART I SYSTEM DATA 1. Total Supported Load(W_T): $W_T = \underline{\hspace{2cm}} \text{ Kg} \times 9.81 = \underline{\hspace{2cm}} \text{ N}$ 2. Number of Isolators(N): $n = \underline{\hspace{2cm}}$ 3. Static Load per Isolator(w): $W = \frac{W_T}{n}$ 4. Load Axis: Compression Shear/Roll 45° Compression/ Roll | | |
| PART II VIBRATION SIZING 1. Input Excitation Frequency $(f_i) = \underline{\hspace{2cm}} \text{ Hz} = \left(\frac{\text{rpm}}{60} \right)$ 2. System Response Natural Frequency for 80% isolation $(f_n) = \frac{(f_i)}{30} = \underline{\hspace{2cm}} \text{ Hz}$ 3. Maximum Isolator Vibration stiffness(K_v): $K_v = \frac{W (2\pi f_n)}{g}$ $g = 9.81 \text{ m/sec}^2$ 4. Select an isolator by comparing calculated values with technical data for the desired load axis provided in tables for each isolator. a.) Calculated "W" must be less than the isolator's maximum static load. b.) Isolator's vibration stiffness value must be less than the calculated maximum K_v . | | $K_v = \underline{\hspace{2cm}} \text{ N/m}$ |
| PART III Shock Sizing: 1. Maximum Allowable Transmitted Acceleration: $A_T = \underline{\hspace{2cm}} \text{ G 's}$ 2. Shock Input Velocity: Free Fall Impact: $V = \sqrt{2gh}$ $g = 9.81 \text{ m/sec}^2$ $h = \text{Drop Height (m)}$ 3. Minimum Isolator Response Deflection: $D_{min} = \frac{V^2}{g(A_T)}$ 4. Maximum Isolator Shock Stiffness: $K_s = \frac{W(V/D_{min})^2}{g}$ 5. Select an isolator by comparing calculated values with technical data for the desired load axis provided in tables for each isolator. a.) Calculated "W" must be less than the isolator's maximum static load. b.) Calculated D_{min} must be less than the isolator's maximum deflection. Note: Metric deflections are calculated in meters(m) and technical data is in millimeters(mm). c.) Isolator's shock stiffness must be less than the calculated maximum "Ks". 6. Check actual deflection using "KS" from technical data to ensure that the isolator's deflection is not exceeded. $D_{actual} = \sqrt{\frac{V}{\frac{K_s(\text{Isolator}) g}{W}}}$ 7. If isolator's maximum deflection is exceeded, select another isolator and repeat Steps 5 and 6. | | $D_{min} = \underline{\hspace{2cm}} \text{ m}$ $K_s = \underline{\hspace{2cm}} \text{ N/m}$ |



Note: Dimensions are in mm /
Tolerances are $\pm 0.25\text{mm}$



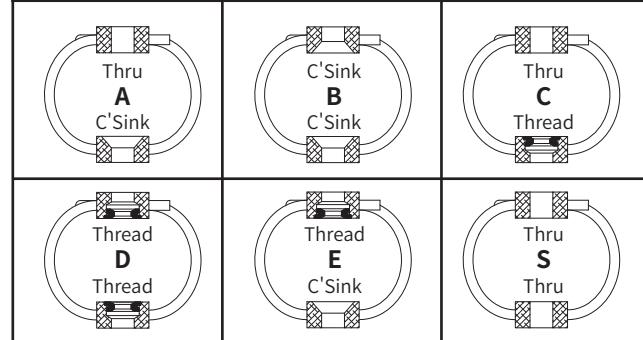
| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru Hole mm | Thread mm | C'Sink Metric |
|---------|----------------------|---------------------|-------------------|------------------|-----------------|--------------|------------------|
| WR2-100 | 18 | ± 1.52 | 25 | B, D, E | $Ø4.7 \pm 0.13$ | M4 X 0.7 | 90° |
| WR2-200 | 20 | | 28 | | | | |
| WR2-400 | 25 | | 30 | | | | |
| WR2-600 | 28 | | 33 | | | | |
| WR2-700 | 30 | | 36 | | | | |
| WR2-800 | 33 | | 38 | | | | |

Ordering Example

WR2 - 400 - 10 D T M

- Add "M" for Metric
- Threaded Hole Options
 - *[] -Flush Self Clinching Threaded Insert
 - [T] -Tapped
- Mounting Options See chart
- Number of Loops 10 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

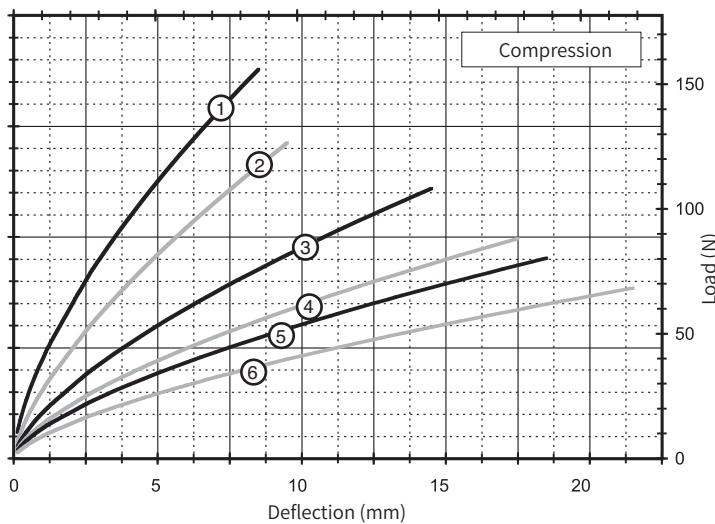
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 0.7 Nm.
- Operating Temperature Range:-100°C~260°C

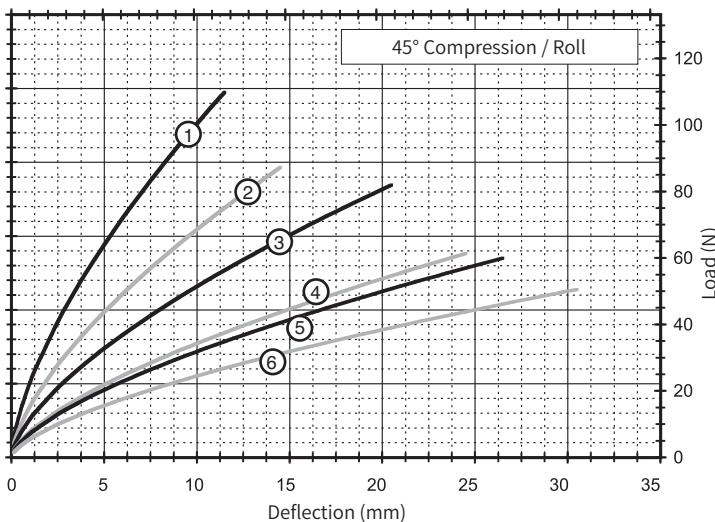
Static Load vs Deflection



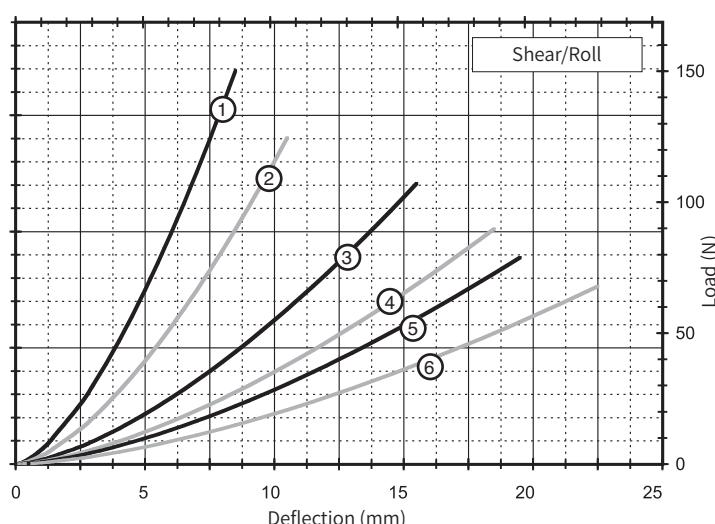
Compression

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR2-100-10 | 47 | 8.6 | 36 | 22 |
| 2 | WR2-200-10 | 36 | 9.7 | 25 | 16 |
| 3 | WR2-400-10 | 31 | 14.7 | 17 | 8.8 |
| 4 | WR2-600-10 | 27 | 17.8 | 12 | 6.1 |
| 5 | WR2-700-10 | 22 | 18.8 | 11 | 5.3 |
| 6 | WR2-800-10 | 20 | 21.8 | 7.9 | 3.9 |

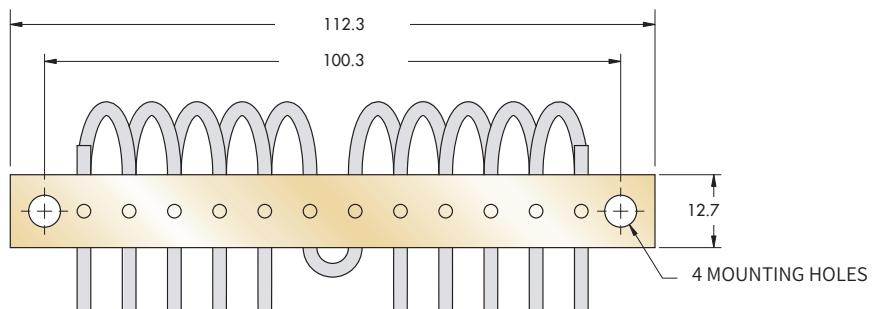
45° Compression / Roll



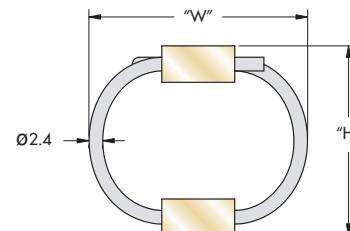
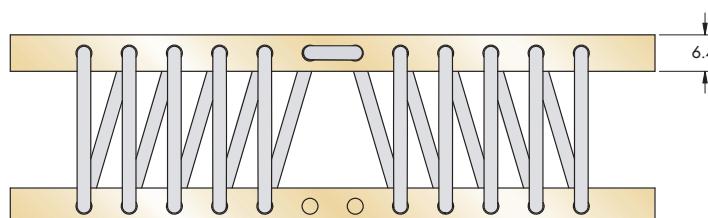
Shear/Roll



Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are $\pm 0.25\text{mm}$



| Model | Height ("H") mm | | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric | | | |
|---------|--------------------|----|-------------------|-------------------|---------------------|-------------|--------------|------------------|--|--|--|
| WR3-100 | ± 1.52 | 23 | 28 | 0.06 | B, D, E | Ø5.6 ± 0.13 | M5 X 0.8 | 90° | | | |
| WR3-200 | | 25 | | 0.07 | A, B, C, D, E, S | | | | | | |
| WR3-400 | | 28 | | 0.07 | | | | | | | |
| WR3-600 | | 33 | | 0.07 | | | | | | | |
| WR3-700 | | 36 | | 0.07 | | | | | | | |
| WR3-800 | | 38 | | 0.08 | | | | | | | |

Ordering Example

WR3 - 400 - 10 D T M

Add "M" for Metric

Threaded Hole Options

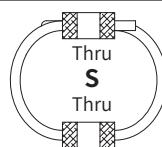
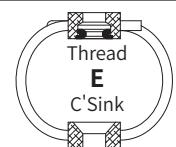
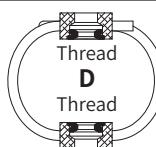
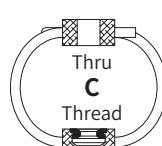
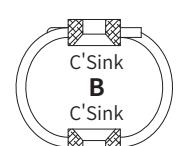
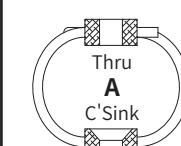
*[] -Flush Self Clinching Threaded Insert
[T] -Tapped

Mounting Options See chart

Number of Loops 10 (Reduced
Number of Loops Available)

Isolator Size See Sizing Table

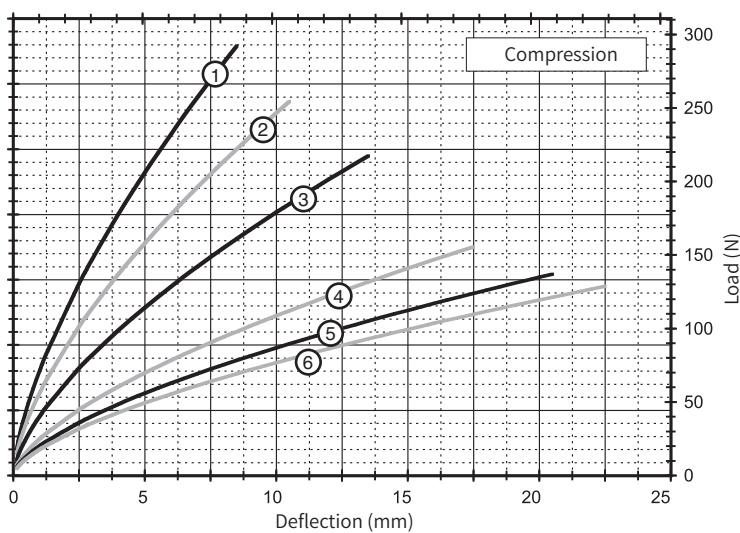
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 0.9 Nm.
- Operating Temperature Range: -100°C~260°C

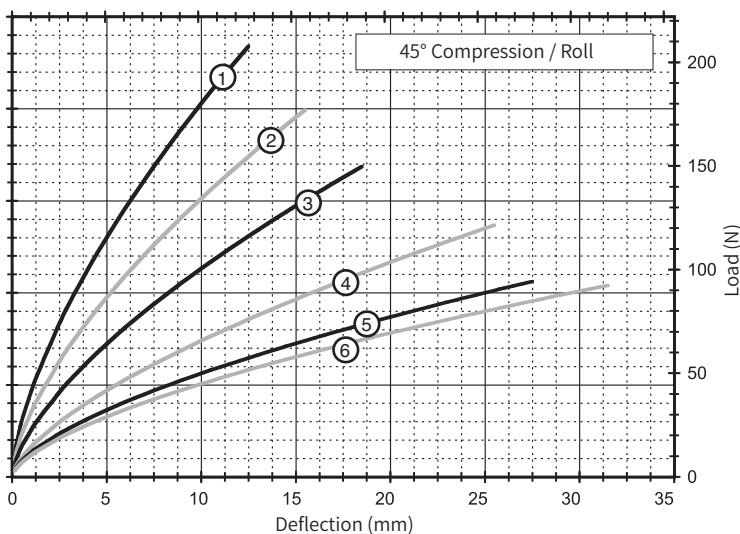
Static Load vs Deflection



Compression

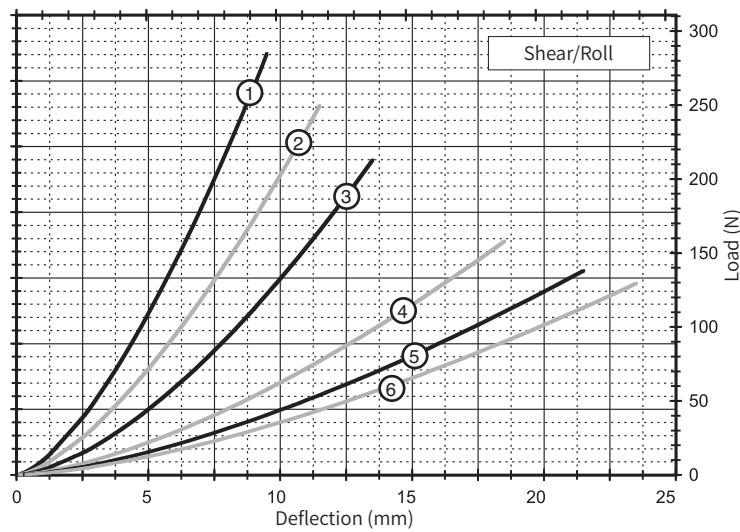
| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR3-100-10 | 85 | 8.6 | 65 | 40 |
| 2 | WR3-200-10 | 76 | 10.7 | 51 | 30 |
| 3 | WR3-400-10 | 62 | 13.7 | 37 | 19 |
| 4 | WR3-600-10 | 44 | 17.8 | 23 | 11 |
| 5 | WR3-700-10 | 40 | 20.8 | 18 | 7.9 |
| 6 | WR3-800-10 | 40 | 22.9 | 16 | 7.0 |

45° Compression / Roll



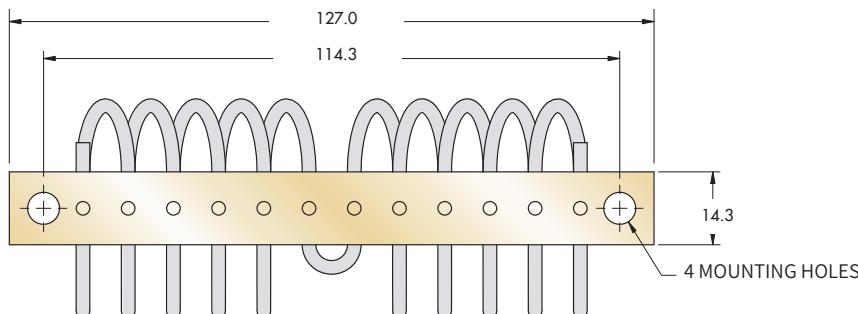
| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR3-100-10 | 62 | 12.7 | 38 | 20 |
| 2 | WR3-200-10 | 53 | 15.7 | 28 | 14 |
| 3 | WR3-400-10 | 44 | 18.8 | 21 | 9.6 |
| 4 | WR3-600-10 | 36 | 25.9 | 13 | 5.6 |
| 5 | WR3-700-10 | 31 | 27.9 | 11 | 4.4 |
| 6 | WR3-800-10 | 27 | 32.0 | 9.6 | 3.5 |

Shear/Roll

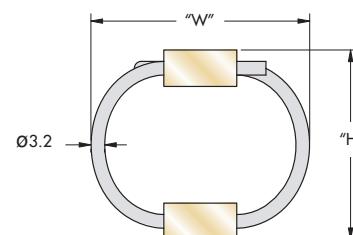
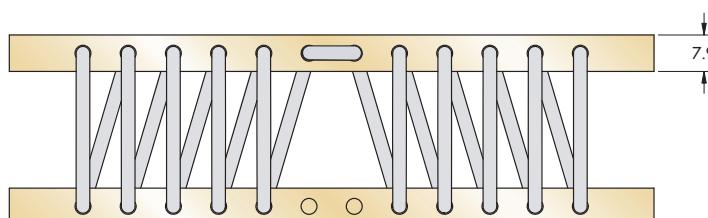


| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR3-100-10 | 44 | 9.7 | 24 | 24 |
| 2 | WR3-200-10 | 40 | 11.7 | 18 | 18 |
| 3 | WR3-400-10 | 31 | 13.7 | 12 | 12 |
| 4 | WR3-600-10 | 27 | 18.8 | 7.0 | 7.0 |
| 5 | WR3-700-10 | 22 | 21.8 | 5.3 | 5.3 |
| 6 | WR3-800-10 | 18 | 23.9 | 4.4 | 4.4 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are $\pm 0.25\text{mm}$



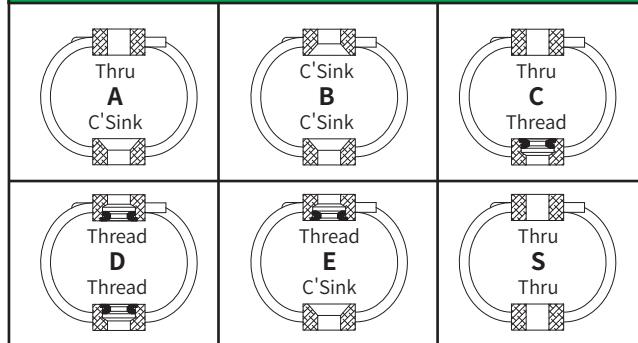
| Model | Height ("H") mm | | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric | | | |
|---------|----------------------|------------|---------------------|-------------------|---------------------|-----------------|--------------|------------------|--|--|--|
| WR4-100 | 28 | ± 1.52 | 36 | 0.12 | B, D, E | 06.9 ± 0.13 | M6 X 1.0 | 90° | | | |
| WR4-200 | | | 38 | 0.12 | | | | | | | |
| WR4-400 | | | 41 | 0.13 | A, B, C, D, E, S | | | | | | |
| WR4-500 | | | 43 | 0.13 | | | | | | | |
| WR4-600 | | | 46 | 0.13 | | | | | | | |
| WR4-700 | | | 48 | 0.14 | | | | | | | |
| WR4-800 | | | 51 | 0.14 | | | | | | | |

Ordering Example

WR4 - 400 - 10 D T M

- Add "M" for Metric
- Threaded Hole Options
 - * [] -Flush Self Clinching Threaded Insert
 - [T] -Tapped
- Mounting Options See chart
- Number of Loops 10 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

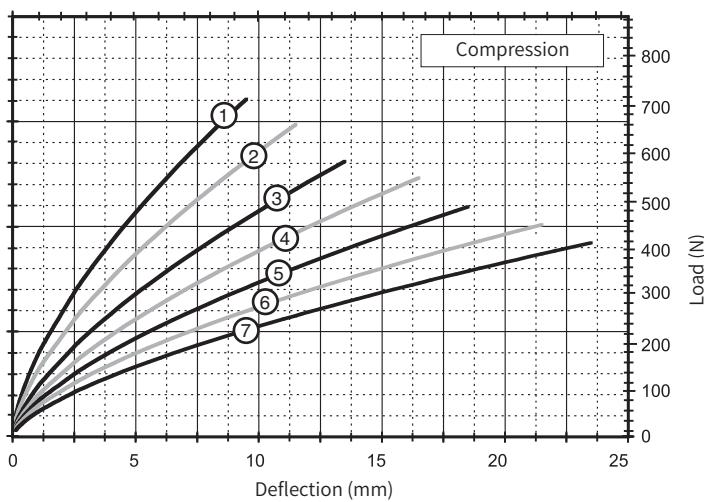
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 3.7 Nm.
- Operating Temperature Range:-100°C~260°C

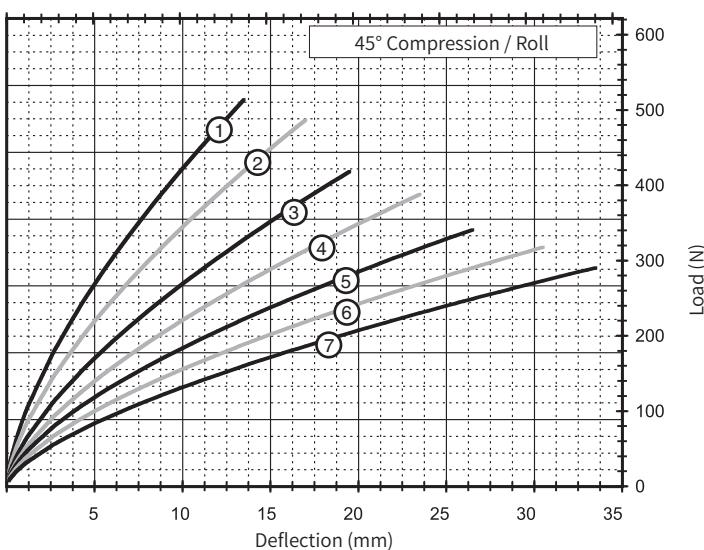
Static Load vs Deflection



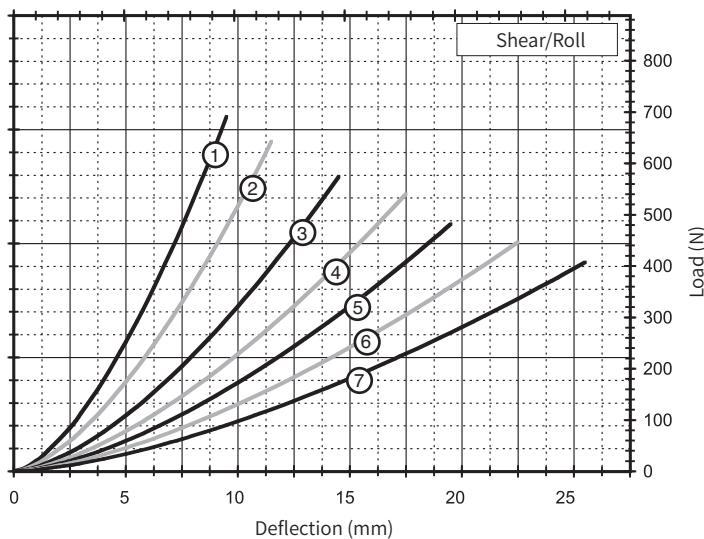
Compression

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR4-100-10 | 213 | 9.7 | 154 | 91 |
| 2 | WR4-200-10 | 194 | 11.7 | 124 | 68 |
| 3 | WR4-400-10 | 166 | 13.7 | 95 | 51 |
| 4 | WR4-500-10 | 156 | 16.8 | 78 | 39 |
| 5 | WR4-600-10 | 142 | 18.8 | 67 | 32 |
| 6 | WR4-700-10 | 133 | 21.8 | 57 | 25 |
| 7 | WR4-800-10 | 117 | 23.9 | 46 | 21 |

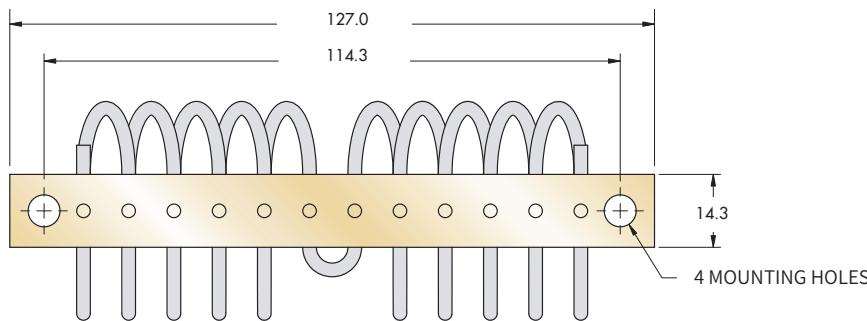
45° Compression / Roll



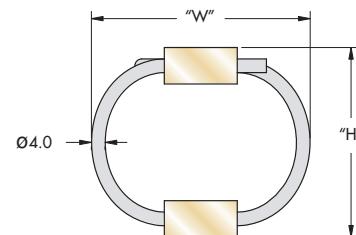
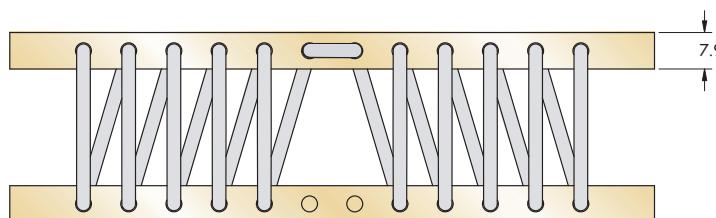
Shear/Roll



Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are $\pm 0.25\text{mm}$



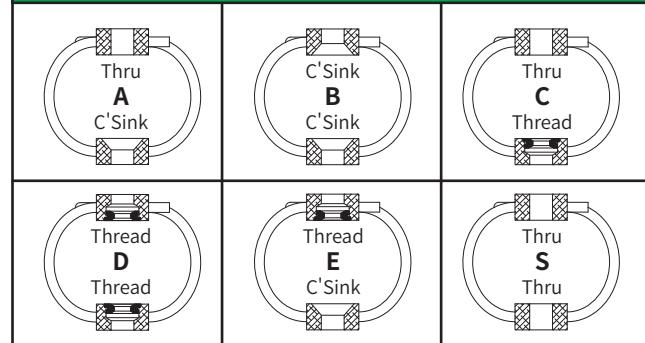
| Model | Height ("H") mm | | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|------------|---------------------|-------------------|---------------------|----------------------------|--------------|------------------|
| WR5-200 | 30 | ± 1.52 | 41 | 0.15 | B, D, E | $\varnothing 6.9 \pm 0.13$ | M6 X 1.0 | 90° |
| WR5-400 | 33 | | 43 | 0.15 | A, B, C, D, E, S | | | |
| WR5-600 | 38 | | 48 | 0.16 | | | | |
| WR5-800 | 46 | | 53 | 0.17 | | | | |
| WR5-900 | 53 | | 64 | 0.18 | | | | |

Ordering Example

WR5 - 400 - 10 D T M

- Add "M" for Metric
- Threaded Hole Options
 - * [] -Flush Self Clinching Threaded Insert
 - [T] -Tapped
- Mounting Options See chart
- Number of Loops 10 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

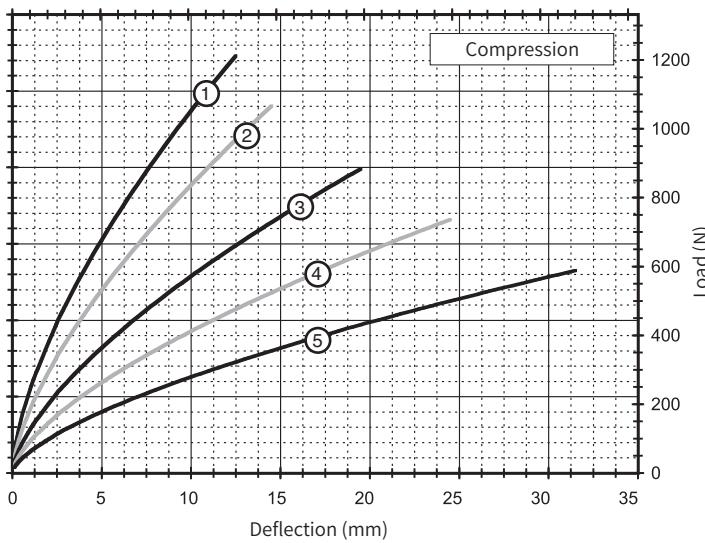
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 4.3 Nm.
- Operating Temperature Range:-100°C~260°C

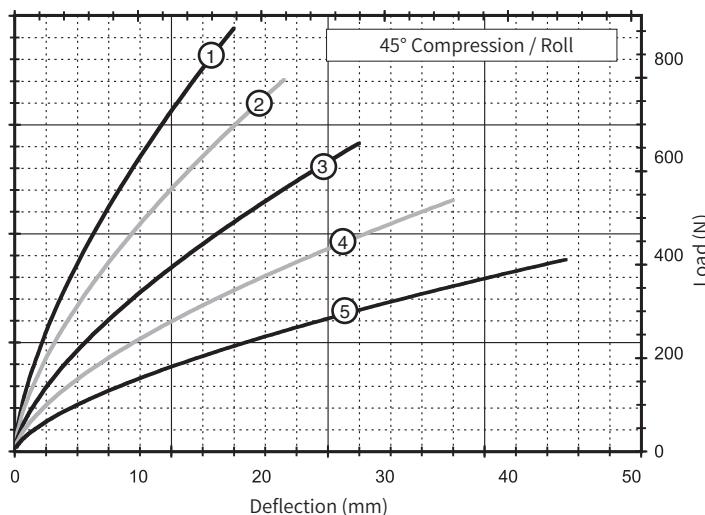
Static Load vs Deflection



Compression

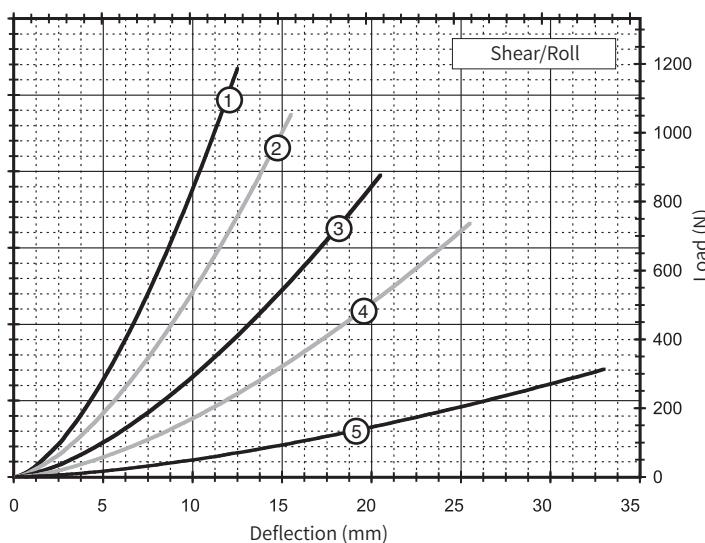
| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR5-200-10 | 364 | 12.7 | 222 | 117 |
| 2 | WR5-400-10 | 309 | 14.7 | 170 | 88 |
| 3 | WR5-600-10 | 257 | 19.8 | 116 | 54 |
| 4 | WR5-800-10 | 216 | 24.9 | 84 | 37 |
| 5 | WR5-900-10 | 172 | 32.0 | 58 | 23 |

45° Compression / Roll

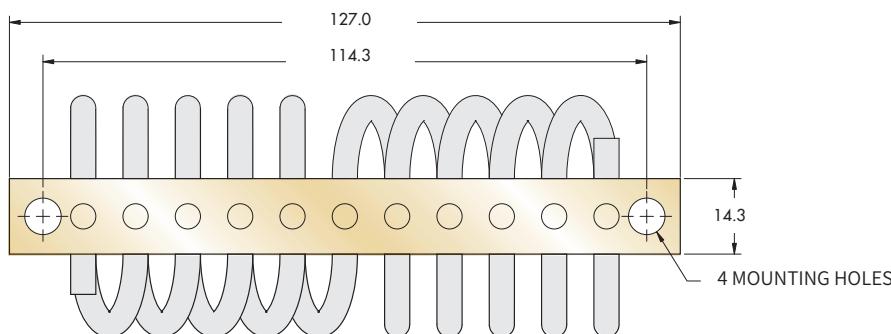


Shear/Roll

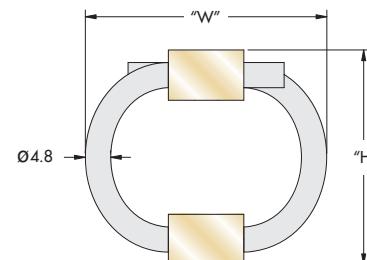
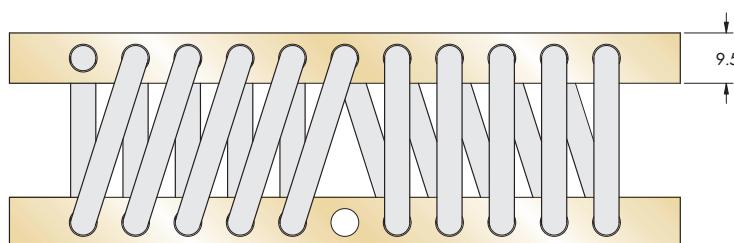
| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR5-200-10 | 178 | 12.7 | 73 | 73 |
| 2 | WR5-400-10 | 156 | 15.7 | 53 | 53 |
| 3 | WR5-600-10 | 133 | 20.8 | 33 | 33 |
| 4 | WR5-800-10 | 111 | 25.9 | 23 | 23 |
| 5 | WR5-900-10 | 40 | 33.5 | 7.9 | 7.9 |



Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are $\pm 0.25\text{mm}$



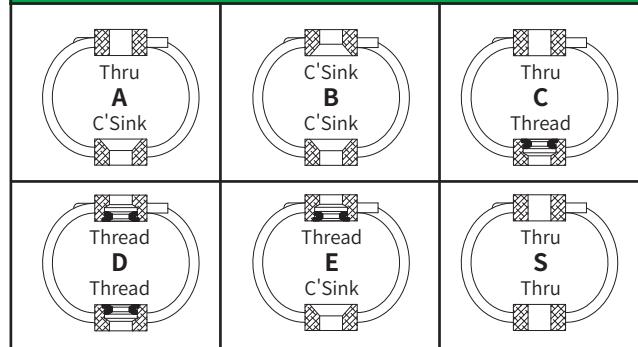
| Model | Height ("H") mm | | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|----|---------------------|-------------------|----------------------------------|-------------|--------------|------------------|
| WR6-200 | ± 1.52 | 30 | 36 | 0.19 | D B, D, E A, B, C, D, E, S | Ø6.9 ± 0.13 | M6 X 1.0 | 90° |
| WR6-300 | | 33 | | 0.20 | | | | |
| WR6-400 | | 36 | | 0.21 | | | | |
| WR6-500 | | 38 | | 0.21 | | | | |
| WR6-600 | | 41 | | 0.22 | | | | |
| WR6-700 | | 43 | | 0.25 | | | | |
| WR6-800 | | 51 | | 0.26 | | | | |
| WR6-850 | | 54 | 75 | 0.27 | | | | |
| WR6-900 | | 62 | | 0.28 | | | | |
| WR6-950 | | 81 | | 0.29 | | | | |

Ordering Example

WR6 - 400 - 10 D T M

- Add "M" for Metric
- Threaded Hole Options
 - * [] -Flush Self Clinching Threaded Insert
 - [T] -Tapped
- Mounting Options See chart
- Number of Loops 10 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

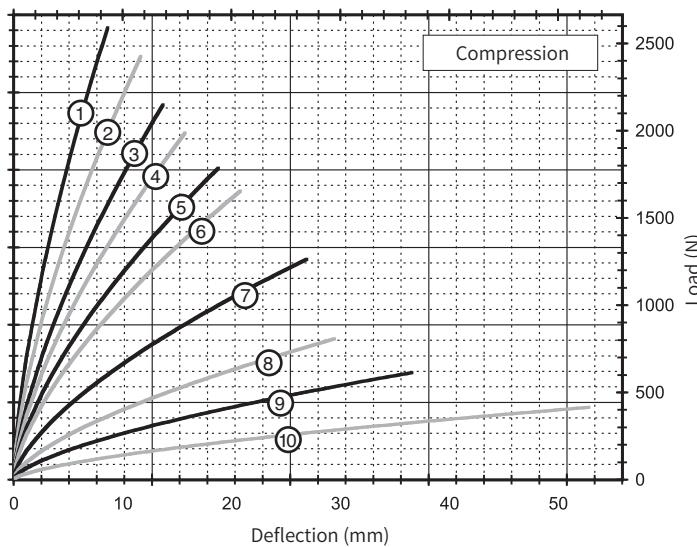
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 4.3 Nm.
- Operating Temperature Range:-100°C~260°C

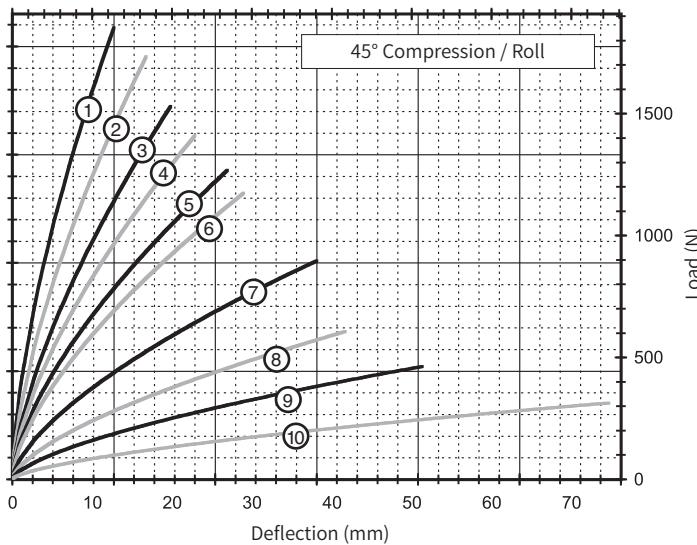
Static Load vs Deflection



Compression

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR6-200-10 | 734 | 8.6 | 578 | 363 |
| 2 | WR6-300-10 | 712 | 11.7 | 455 | 252 |
| 3 | WR6-400-10 | 601 | 13.7 | 347 | 189 |
| 4 | WR6-500-10 | 578 | 15.7 | 301 | 152 |
| 5 | WR6-600-10 | 512 | 18.8 | 244 | 117 |
| 6 | WR6-700-10 | 489 | 20.8 | 212 | 96 |
| 7 | WR6-800-10 | 365 | 26.9 | 136 | 58 |
| 8 | WR6-850-10 | 236 | 29.5 | 82 | 33 |
| 9 | WR6-900-10 | 178 | 36.6 | 54 | 21 |
| 10 | WR6-950-10 | 120 | 52.8 | 29 | 10 |

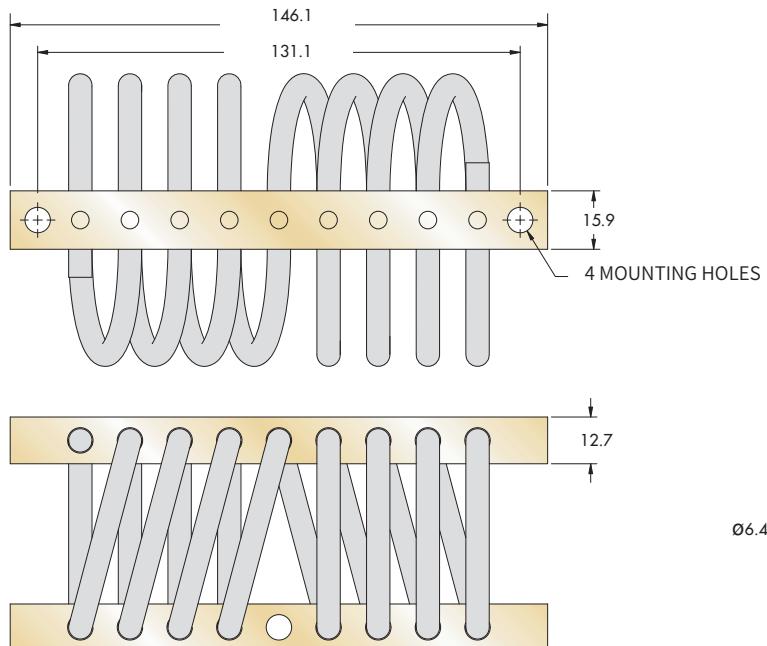
45° Compression / Roll



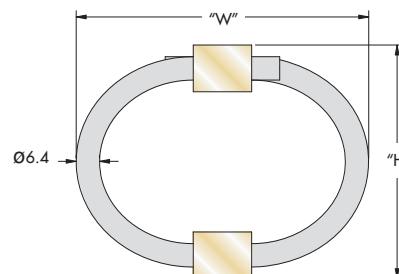
Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR6-200-10 | 356 | 8.6 | 224 | 224 |
| 2 | WR6-300-10 | 356 | 11.7 | 156 | 156 |
| 3 | WR6-400-10 | 334 | 14.7 | 112 | 112 |
| 4 | WR6-500-10 | 311 | 16.8 | 93 | 93 |
| 5 | WR6-600-10 | 289 | 19.8 | 70 | 70 |
| 6 | WR6-700-10 | 267 | 21.8 | 60 | 60 |
| 7 | WR6-800-10 | 200 | 27.9 | 35 | 35 |
| 8 | WR6-850-10 | 58 | 31.0 | 11 | 11 |
| 9 | WR6-900-10 | 40 | 38.1 | 5.3 | 5.3 |
| 10 | WR6-950-10 | 22 | 55.9 | 2.3 | 2.3 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are $\pm 0.25\text{mm}$



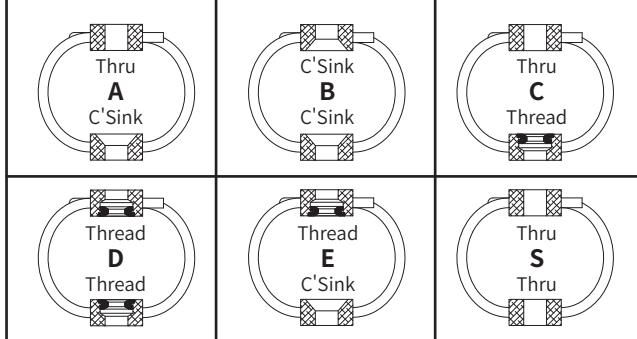
| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|---------------------|-------------------|---------------------|-----------------|--------------|------------------|
| WR8-200 | 48 | ± 2.54 | 56 | A, B, C, D, E, S | 06.9 ± 0.13 | M6 X 1.0 | 90° |
| WR8-400 | 54 | | 64 | | | | |
| WR8-500 | 59 | | 71 | | | | |
| WR8-600 | 64 | | 80 | | | | |
| WR8-700 | 64 | | 89 | | | | |
| WR8-800 | 67 | | 95 | | | | |
| WR8-850 | 67 | ± 3.81 | 100 | | | | |
| WR8-900 | 83 | | 108 | | | | |

Ordering Example

WR8 - 400 - 8 D T M

- Add "M" for Metric
- Threaded Hole Options
 - * [] -Flush Self Clinching Threaded Insert
 - [T] -Tapped
- Mounting Options See chart
- Number of Loops 8 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

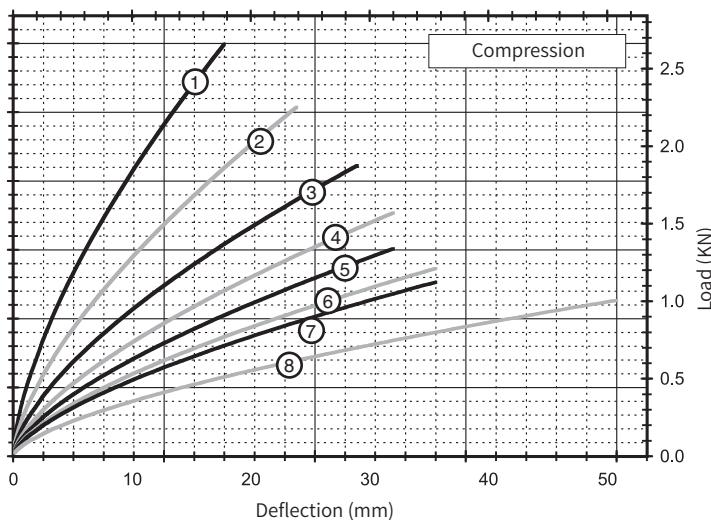
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 4.3 Nm.
- Operating Temperature Range:-100°C~260°C

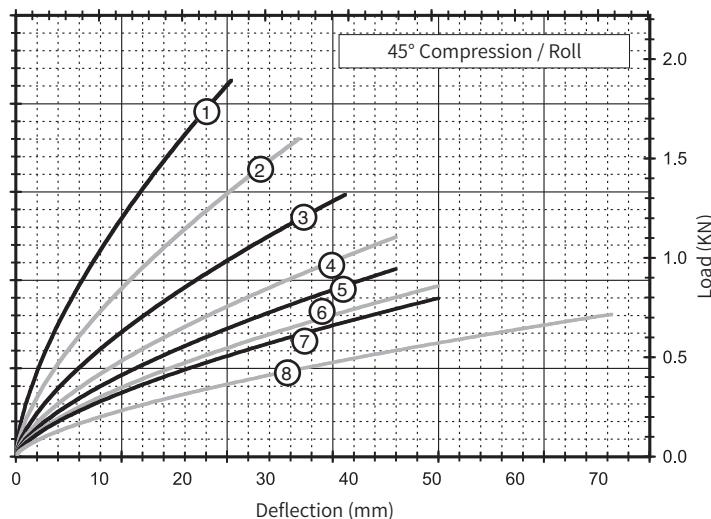
Static Load vs Deflection



Compression

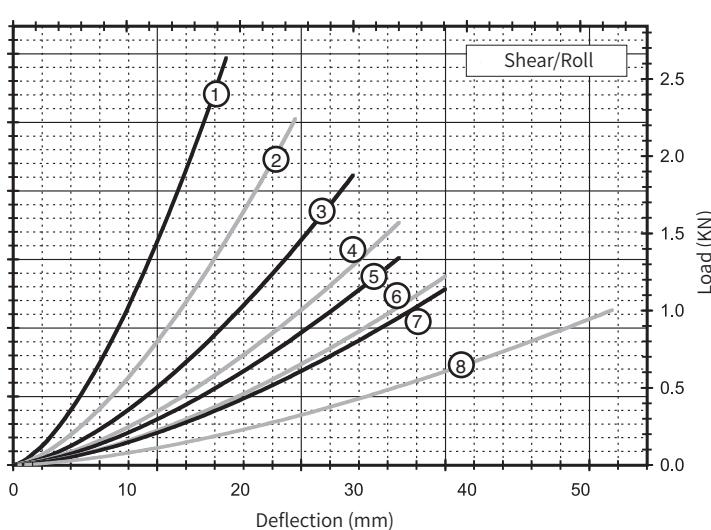
| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR8-200-08 | 778 | 17.8 | 382 | 182 |
| 2 | WR8-400-08 | 667 | 23.9 | 266 | 116 |
| 3 | WR8-500-08 | 556 | 29.0 | 196 | 79 |
| 4 | WR8-600-08 | 445 | 32.0 | 151 | 60 |
| 5 | WR8-700-08 | 386 | 32.0 | 127 | 51 |
| 6 | WR8-800-08 | 351 | 35.6 | 109 | 42 |
| 7 | WR8-850-08 | 325 | 35.6 | 100 | 39 |
| 8 | WR8-900-08 | 297 | 50.8 | 74 | 25 |

45° Compression / Roll



Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR8-200-08 | 556 | 25.9 | 215 | 89 |
| 2 | WR8-400-08 | 467 | 34.0 | 151 | 58 |
| 3 | WR8-500-08 | 390 | 39.6 | 109 | 40 |
| 4 | WR8-600-08 | 321 | 45.7 | 86 | 30 |
| 5 | WR8-700-08 | 273 | 45.7 | 72 | 25 |
| 6 | WR8-800-08 | 248 | 50.8 | 61 | 21 |
| 7 | WR8-850-08 | 229 | 50.8 | 56 | 19 |
| 8 | WR8-900-08 | 209 | 71.6 | 41 | 12 |

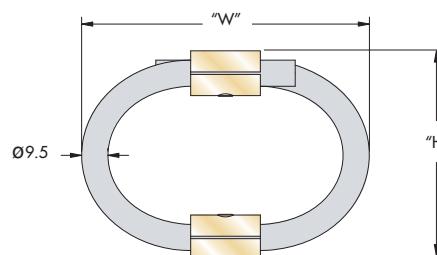
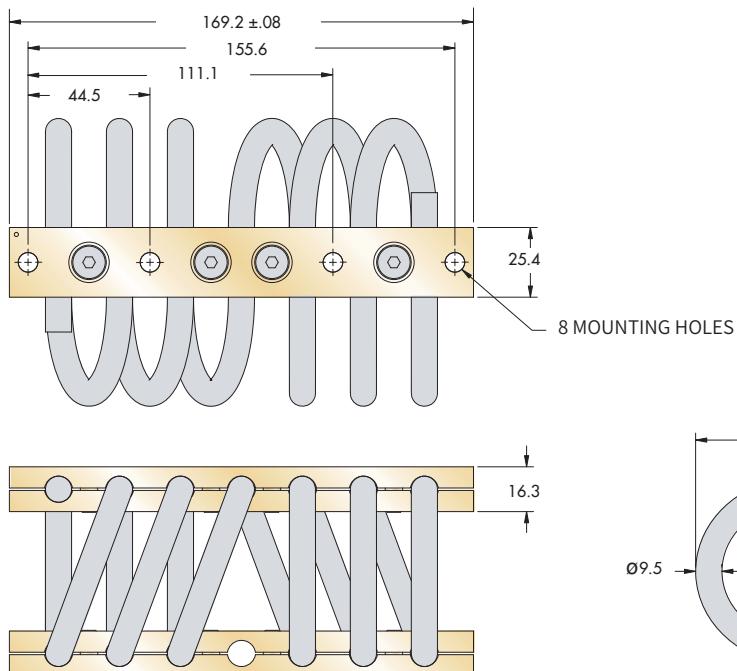


Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR8-200-08 | 423 | 18.8 | 110 | 110 |
| 2 | WR8-400-08 | 356 | 24.9 | 72 | 72 |
| 3 | WR8-500-08 | 311 | 30.0 | 49 | 49 |
| 4 | WR8-600-08 | 245 | 34.0 | 37 | 37 |
| 5 | WR8-700-08 | 222 | 34.0 | 32 | 32 |
| 6 | WR8-800-08 | 200 | 38.1 | 25 | 25 |
| 7 | WR8-850-08 | 178 | 38.1 | 23 | 23 |
| 8 | WR8-900-08 | 156 | 52.8 | 16 | 16 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.

6-Loop



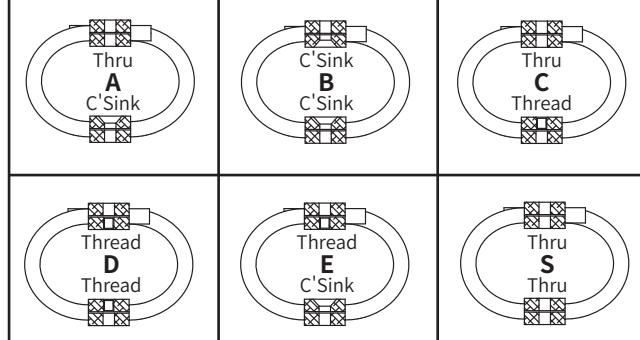
| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|----------|--------------------|-------------------|-------------------|---------------------|----------------------------------|--------------|------------------|
| WR12-206 | 71 | ± 2.54 | 84 | A, B, C, D, E, S | Ø9.0 ^{+ 0.13} - 0.38 | M6 X 1.0 | 90° |
| WR12-306 | 74 | | 89 | | | | |
| WR12-406 | 76 | | 105 | | | | |
| WR12-506 | 83 | | 108 | | | | |
| WR12-606 | 89 | | 108 | | | | |
| WR12-706 | 105 | | 121 | | | | |
| WR12-806 | 108 | | 140 | | | | |

Ordering Example

WR12 - 406 - 6 D H M

- Add "M" for Metric
- Threaded Hole Options
 - *[] -Tapped
 - [H] -Helical Insert, Free Running
 - [L] -Helical Insert, Self Locking
- Mounting Options See chart
- Number of Loops 6 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

Mounting Options

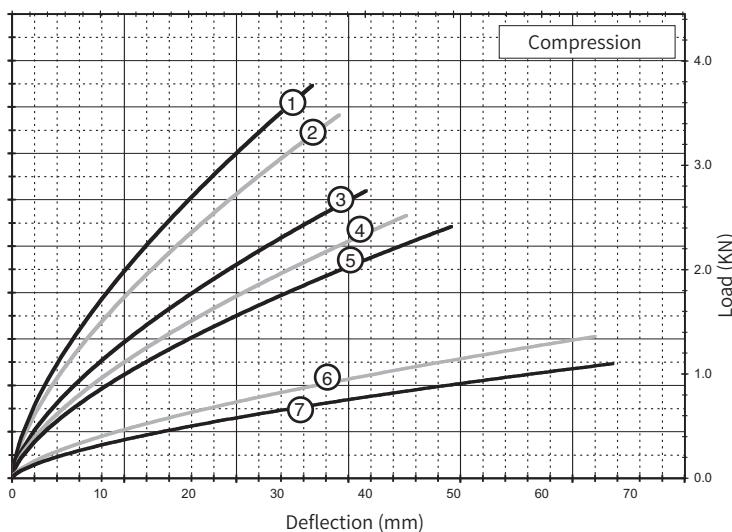


*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 10 Nm.
- Operating Temperature Range:-100°C~260°C

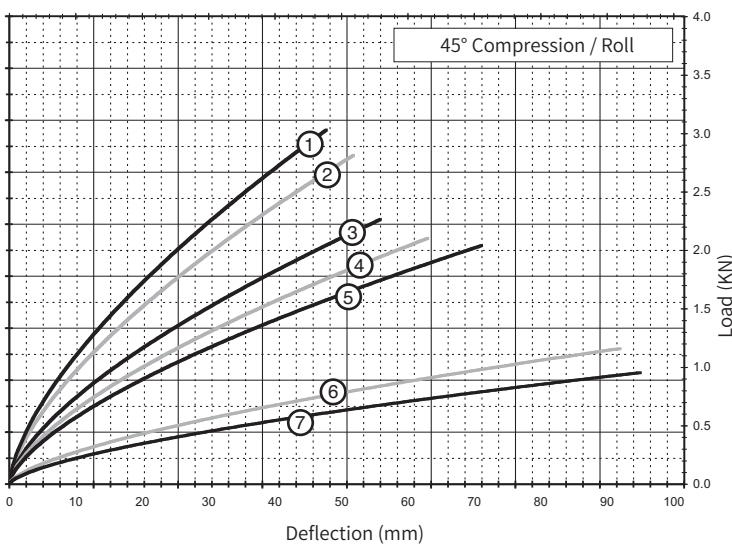
6-Loop

Static Load vs Deflection



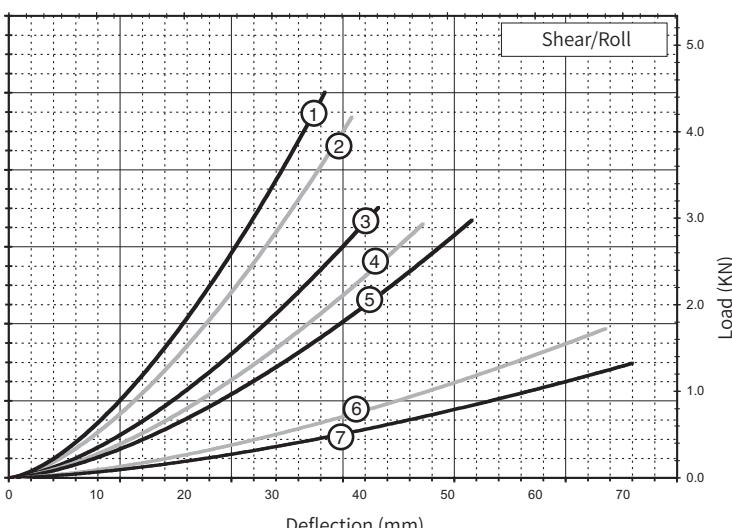
Compression

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR12-206-06 | 1 090 | 34.0 | 275 | 135 |
| 2 | WR12-306-06 | 1 023 | 37.1 | 240 | 114 |
| 3 | WR12-406-06 | 801 | 40.1 | 180 | 84 |
| 4 | WR12-506-06 | 734 | 44.7 | 154 | 68 |
| 5 | WR12-606-06 | 712 | 49.8 | 137 | 60 |
| 6 | WR12-706-06 | 396 | 66.0 | 65 | 25 |
| 7 | WR12-806-06 | 320 | 68.1 | 51 | 19 |



45° Compression / Roll

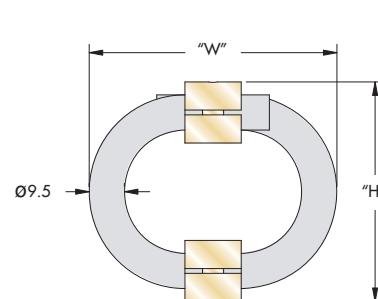
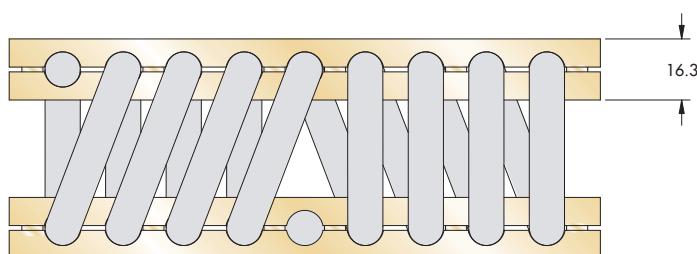
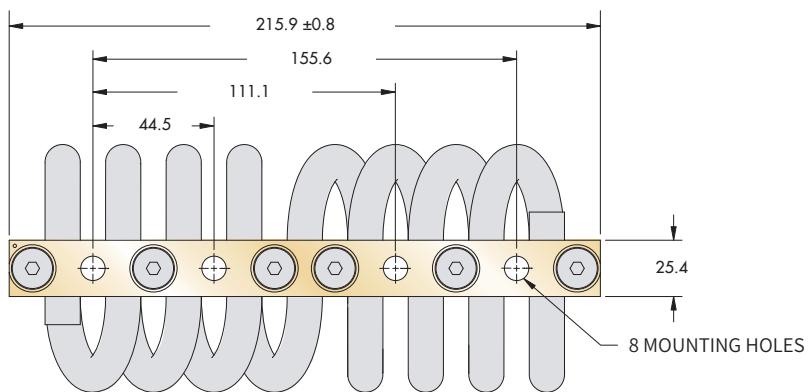
| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR12-206-06 | 890 | 47.8 | 177 | 77 |
| 2 | WR12-306-06 | 823 | 51.8 | 156 | 67 |
| 3 | WR12-406-06 | 667 | 55.9 | 120 | 49 |
| 4 | WR12-506-06 | 623 | 63.0 | 103 | 40 |
| 5 | WR12-606-06 | 601 | 71.1 | 92 | 35 |
| 6 | WR12-706-06 | 341 | 91.9 | 44 | 16 |
| 7 | WR12-806-06 | 280 | 95.0 | 36 | 12 |



Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR12-206-06 | 689 | 36.1 | 98 | 98 |
| 2 | WR12-306-06 | 645 | 39.1 | 84 | 84 |
| 3 | WR12-406-06 | 489 | 42.2 | 58 | 58 |
| 4 | WR12-506-06 | 467 | 47.2 | 49 | 49 |
| 5 | WR12-606-06 | 445 | 52.8 | 44 | 44 |
| 6 | WR12-706-06 | 200 | 68.1 | 20 | 20 |
| 7 | WR12-806-06 | 156 | 71.1 | 15 | 15 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|----------|----------------------|---------------------|-------------------|---------------------|------------|--------------|------------------|
| WR12-200 | 71 | | 1.10 | | | | |
| WR12-300 | 74 | | 1.13 | | | | |
| WR12-400 | 76 | | 1.20 | | | | |
| WR12-500 | 83 | | 1.26 | | | | |
| WR12-600 | 89 | | 1.30 | | | | |
| WR12-700 | 105 | | 1.43 | | | | |
| WR12-800 | 108 | | 1.50 | | | | |

* Tapped M8 x 1.25, Inserts M6 x 1.0

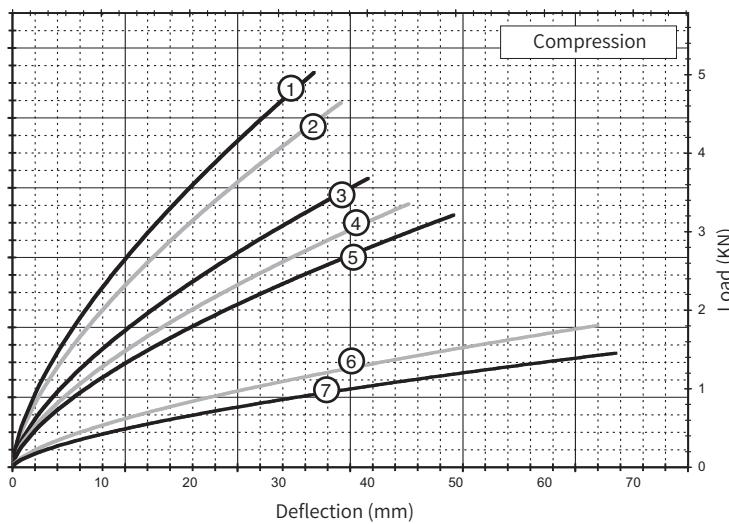
| Ordering Example | | |
|------------------|-------|---|
| WR12 - 400 - 8 | D H M | Add "M" for Metric |
| | | Threaded Hole Options |
| | [] | -Tapped |
| | [H] | -Helical Insert, Free Running |
| | [L] | -Helical Insert, Self Locking |
| | | Mounting Options See chart |
| | | Number of Loops 8 (Reduced Number of Loops Available) |
| | | Isolator Size See Sizing Table |

| Mounting Options | | |
|------------------------------|------------------------------|----------------------------|
| Thru A C'Sink | C'Sink B C'Sink | Thru C Thread |
| Thread D Thread | Thread E C'Sink | Thru S Thru |

*Standard characteristics. Delivery time may be postponed for non-standard products.

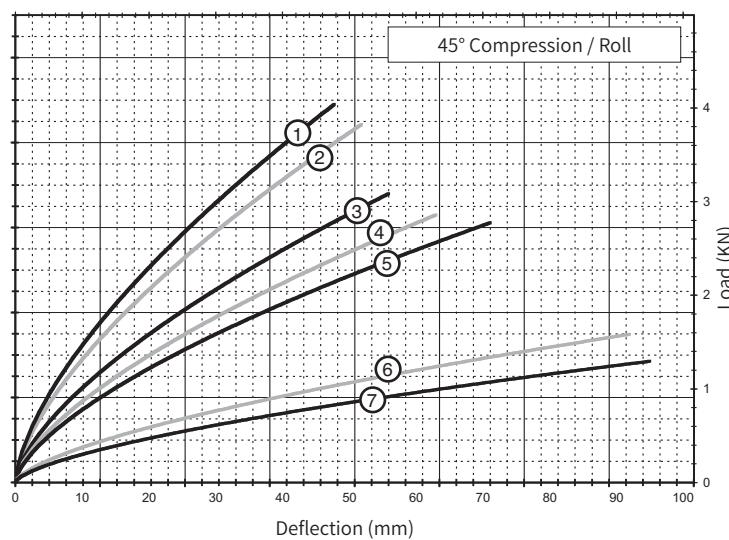
- Maximum recommended torque for standard threaded insert is 20 Nm.
- Operating Temperature Range:-100°C~260°C

Static Load vs Deflection



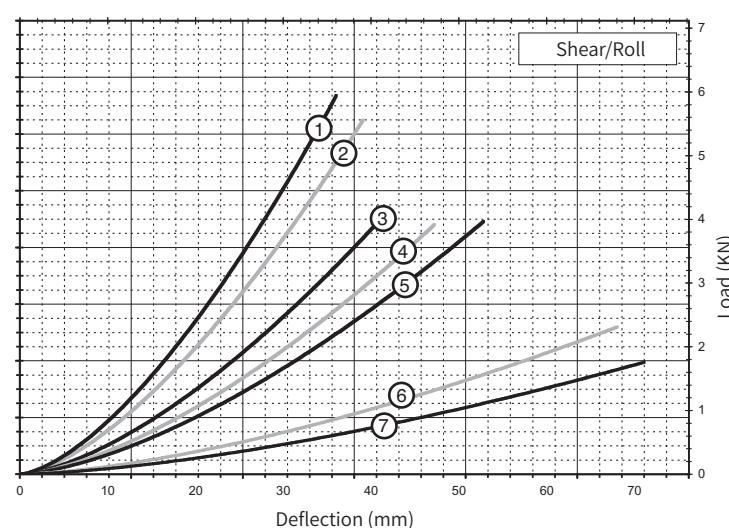
Compression

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR12-200-08 | 1 468 | 34.0 | 366 | 179 |
| 2 | WR12-300-08 | 1 357 | 37.1 | 320 | 152 |
| 3 | WR12-400-08 | 1 068 | 40.1 | 242 | 110 |
| 4 | WR12-500-08 | 979 | 44.7 | 205 | 91 |
| 5 | WR12-600-08 | 934 | 49.8 | 182 | 79 |
| 6 | WR12-700-08 | 534 | 66.0 | 86 | 33 |
| 7 | WR12-800-08 | 423 | 68.1 | 67 | 26 |



45° Compression / Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR12-200-08 | 1 179 | 47.8 | 236 | 103 |
| 2 | WR12-300-08 | 1 090 | 51.8 | 208 | 88 |
| 3 | WR12-400-08 | 890 | 55.9 | 159 | 65 |
| 4 | WR12-500-08 | 823 | 63.0 | 137 | 54 |
| 5 | WR12-600-08 | 778 | 71.1 | 123 | 47 |
| 6 | WR12-700-08 | 467 | 91.9 | 60 | 21 |
| 7 | WR12-800-08 | 373 | 95.0 | 47 | 16 |

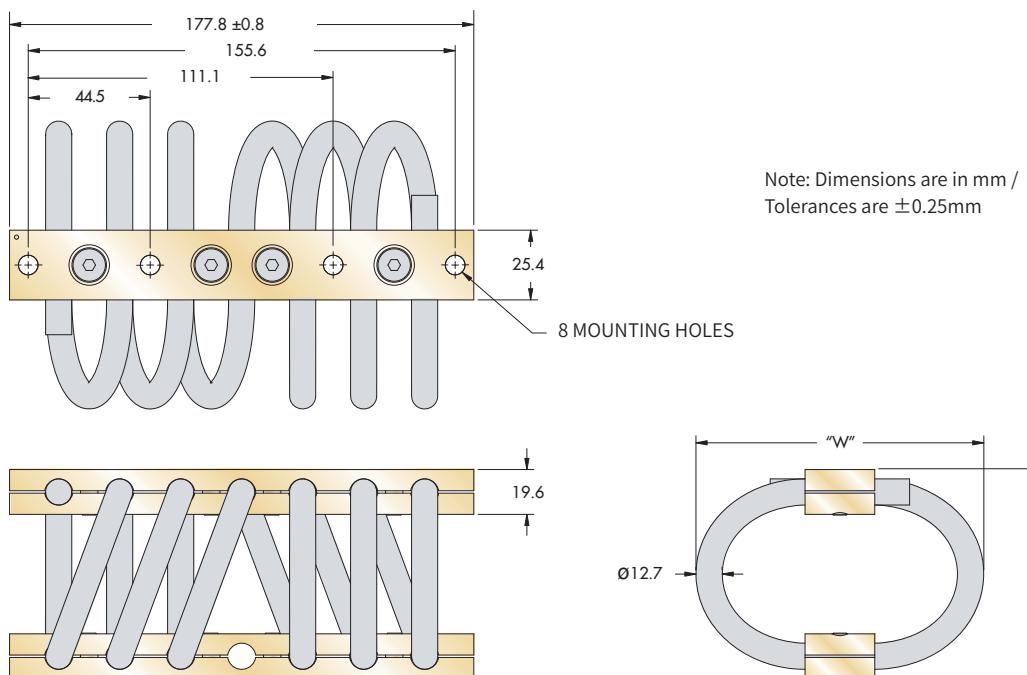


Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR12-200-08 | 912 | 36.1 | 130 | 130 |
| 2 | WR12-300-08 | 867 | 39.1 | 112 | 112 |
| 3 | WR12-400-08 | 667 | 42.2 | 77 | 77 |
| 4 | WR12-500-08 | 623 | 47.2 | 65 | 65 |
| 5 | WR12-600-08 | 601 | 52.8 | 60 | 60 |
| 6 | WR12-700-08 | 267 | 68.1 | 27 | 27 |
| 7 | WR12-800-08 | 200 | 71.1 | 19 | 19 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.

6-Loop



WR

| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|----------|--------------------|-------------------|-------------------|---------------------|------------------------|--------------|------------------|
| WR16-206 | 76 | ± 2.54 | 92 | A, B, C, D, E, S | $09.0^{+0.13}_{-0.38}$ | *M8 X 1.25 | 90° |
| WR16-306 | 83 | | 102 | | | | |
| WR16-406 | 89 | | 105 | | | | |
| WR16-606 | 95 | | 121 | | | | |
| WR16-706 | 108 | | 133 | | | | |
| WR16-806 | 124 | | 144 | | | | |
| WR16-856 | 137 | | 156 | | | | |
| WR16-906 | 155 | | 180 | | | | |

* Tapped M8 x 1.25, Inserts M7 x 1.0

| Ordering Example | | Mounting Options | |
|----------------------|--|--|--|
| WR16 - 406 - 6 D H M | | <ul style="list-style-type: none"> Thru A C'Sink B C'Sink C Thru C Thread D Thread E Thru S | |

Add "M" for Metric

Threaded Hole Options

*[] -Tapped
[H] -Helical Insert, Free Running
[L] -Helical Insert, Self Locking

Mounting Options See chart

Number of Loops 6 (Reduced Number of Loops Available)

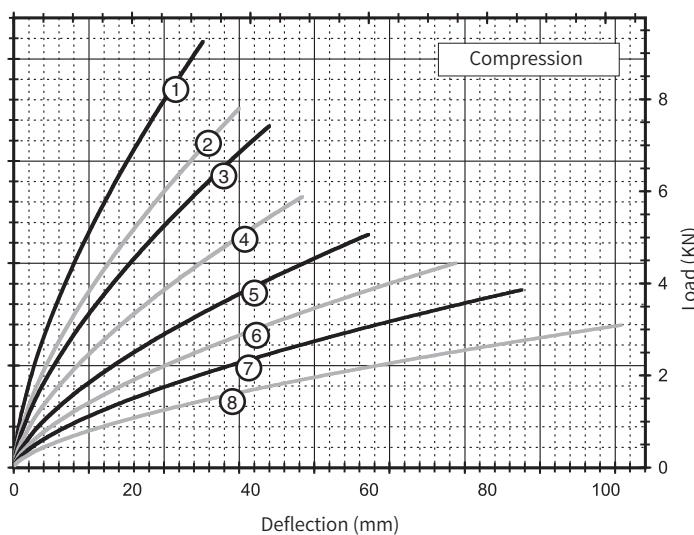
Isolator Size See Sizing Table

*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 20 Nm.
- Operating Temperature Range:-100°C~260°C

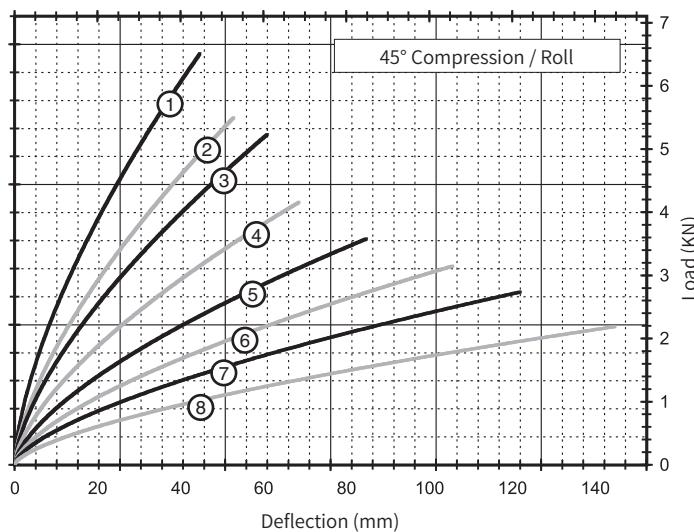
6-Loop

Static Load vs Deflection



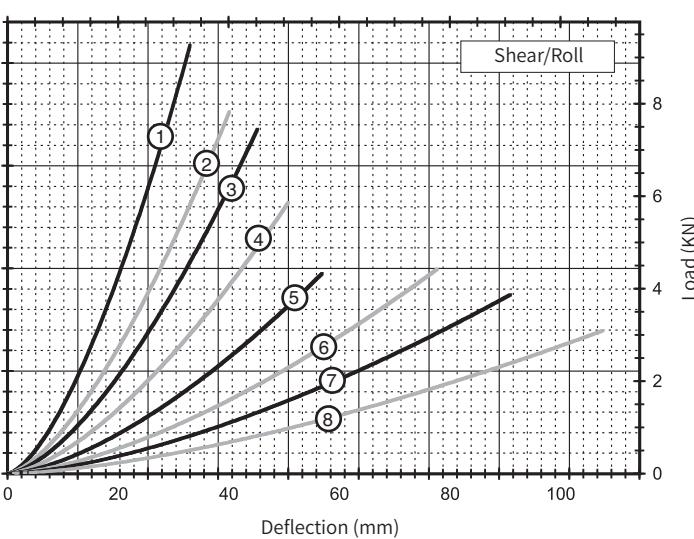
Compression

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR16-206-06 | 2736 | 32.0 | 716 | 352 |
| 2 | WR16-306-06 | 2291 | 38.1 | 531 | 249 |
| 3 | WR16-406-06 | 2157 | 43.2 | 461 | 208 |
| 4 | WR16-606-06 | 1735 | 48.8 | 343 | 147 |
| 5 | WR16-706-06 | 1468 | 59.9 | 256 | 103 |
| 6 | WR16-806-06 | 1290 | 74.7 | 196 | 72 |
| 7 | WR16-856-06 | 1134 | 85.9 | 154 | 54 |
| 8 | WR16-906-06 | 912 | 102.6 | 111 | 37 |



45° Compression / Roll

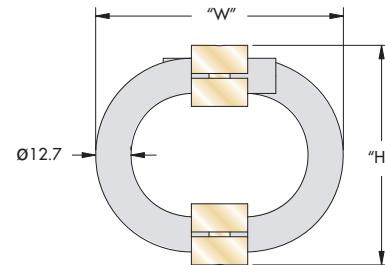
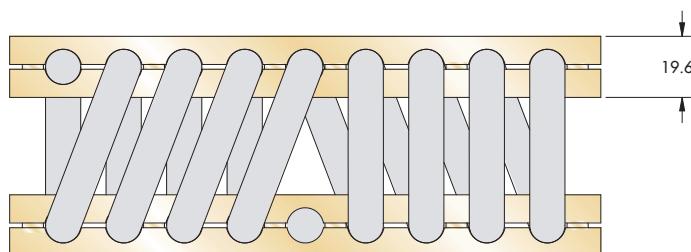
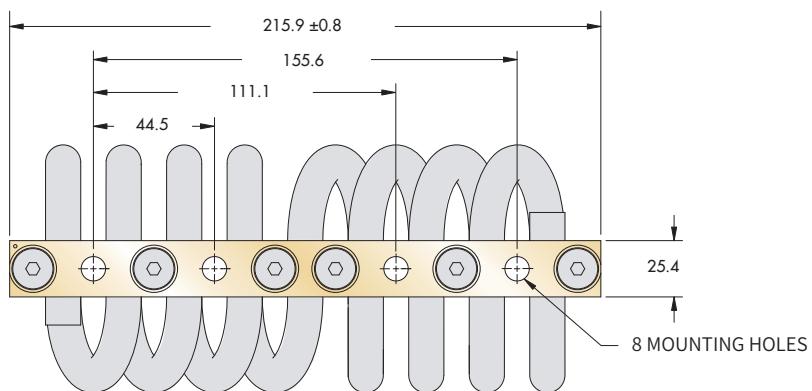
| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR16-206-06 | 1935 | 44.7 | 405 | 177 |
| 2 | WR16-306-06 | 1624 | 52.8 | 298 | 126 |
| 3 | WR16-406-06 | 1535 | 61.0 | 263 | 105 |
| 4 | WR16-606-06 | 1223 | 68.6 | 194 | 74 |
| 5 | WR16-706-06 | 1045 | 84.8 | 144 | 51 |
| 6 | WR16-806-06 | 912 | 105.7 | 110 | 37 |
| 7 | WR16-856-06 | 801 | 121.9 | 88 | 28 |
| 8 | WR16-906-06 | 623 | 144.8 | 62 | 19 |



Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR16-206-06 | 1490 | 33.0 | 221 | 221 |
| 2 | WR16-306-06 | 1223 | 40.1 | 156 | 156 |
| 3 | WR16-406-06 | 1134 | 45.2 | 130 | 130 |
| 4 | WR16-606-06 | 912 | 50.8 | 91 | 91 |
| 5 | WR16-706-06 | 601 | 56.9 | 60 | 60 |
| 6 | WR16-806-06 | 445 | 77.7 | 46 | 46 |
| 7 | WR16-856-06 | 334 | 90.9 | 33 | 33 |
| 8 | WR16-906-06 | 222 | 107.7 | 23 | 23 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|----------|----------------------|---------------------|-------------------|---------------------|-----------------------------------|--------------|------------------|
| WR16-200 | 76 | ± 2.54 | 1.81 | A, B, C, D, E, S | $\varnothing 9.0^{+0.13}_{-0.38}$ | *M8 X 1.25 | 90° |
| WR16-300 | 83 | | 1.91 | | | | |
| WR16-400 | 89 | | 2.00 | | | | |
| WR16-600 | 95 | | 2.22 | | | | |
| WR16-700 | 108 | | 2.40 | | | | |
| WR16-800 | 124 | | 2.70 | | | | |
| WR16-850 | 137 | | 2.90 | | | | |
| WR16-900 | 155 | | 3.09 | | | | |

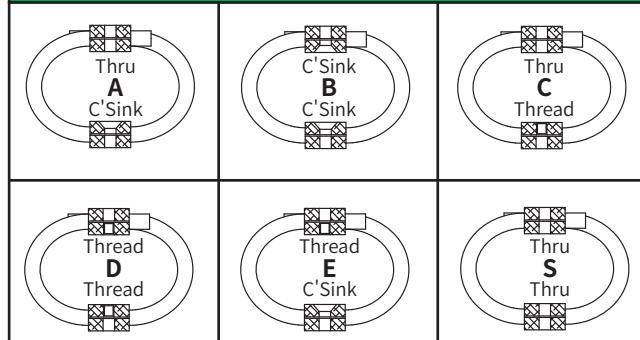
* Tapped M8 x 1.25, Inserts M7 x 1.0

Ordering Example

WR16 - 400 - 8 D H M

- Add "M" for Metric
- Threaded Hole Options
 - * [] -Tapped
 - [H] -Helical Insert, Free Running
 - [L] -Helical Insert, Self Locking
- Mounting Options See chart
- Number of Loops 8 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

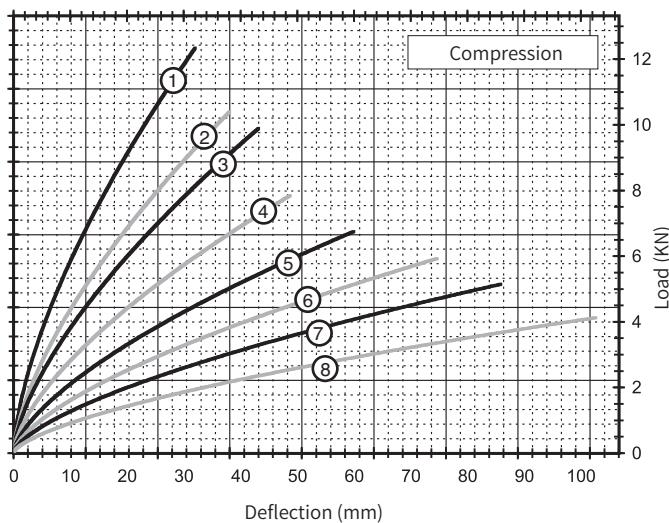
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

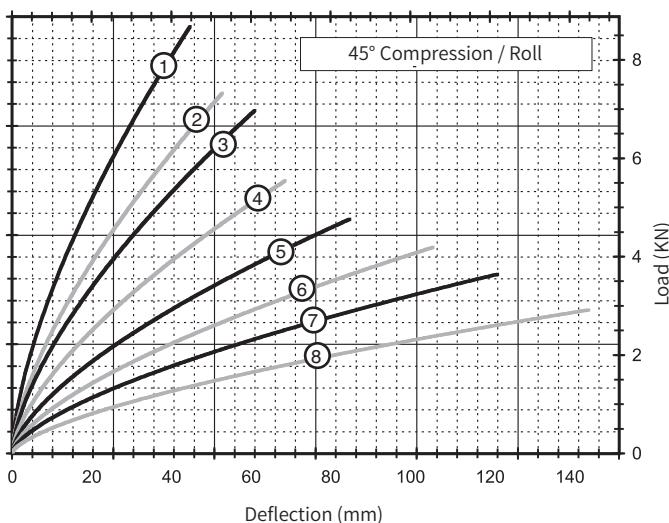
- Maximum recommended torque for standard threaded insert is 20 Nm.
- Operating Temperature Range:-100°C~260°C

Static Load vs Deflection



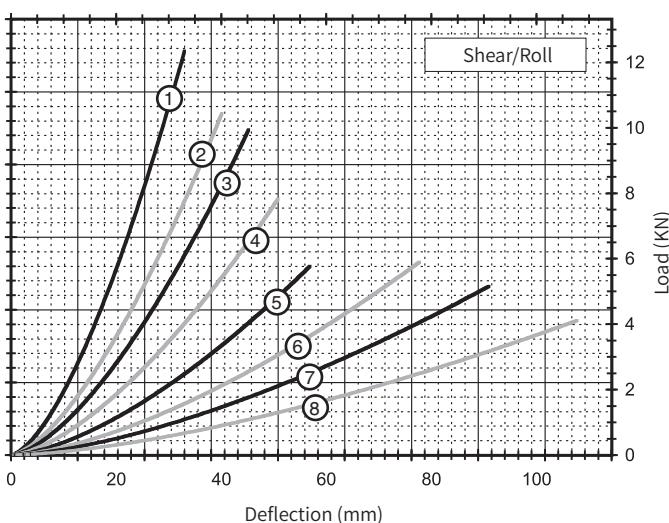
Compression

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR16-200-08 | 3 648 | 32.0 | 954 | 471 |
| 2 | WR16-300-08 | 3 047 | 38.1 | 708 | 333 |
| 3 | WR16-400-08 | 2 869 | 43.2 | 613 | 278 |
| 4 | WR16-600-08 | 2 313 | 48.8 | 457 | 196 |
| 5 | WR16-700-08 | 1 957 | 59.9 | 340 | 137 |
| 6 | WR16-800-08 | 1 735 | 74.7 | 261 | 96 |
| 7 | WR16-850-08 | 1 512 | 85.9 | 207 | 74 |
| 8 | WR16-900-08 | 1 201 | 102.6 | 148 | 49 |



45° Compression / Roll

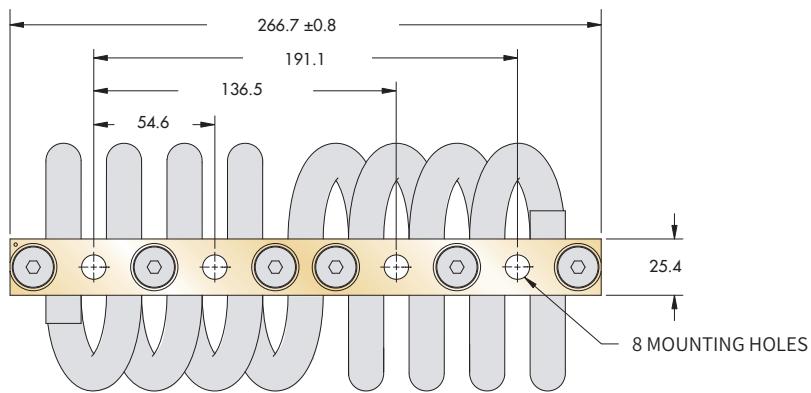
| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR16-200-08 | 2 580 | 44.7 | 539 | 236 |
| 2 | WR16-300-08 | 2 157 | 52.8 | 398 | 168 |
| 3 | WR16-400-08 | 2 046 | 61.0 | 349 | 138 |
| 4 | WR16-600-08 | 1 624 | 68.6 | 259 | 98 |
| 5 | WR16-700-08 | 1 401 | 84.8 | 193 | 68 |
| 6 | WR16-800-08 | 1 223 | 105.7 | 147 | 49 |
| 7 | WR16-850-08 | 1 068 | 121.9 | 117 | 37 |
| 8 | WR16-900-08 | 823 | 144.8 | 83 | 25 |



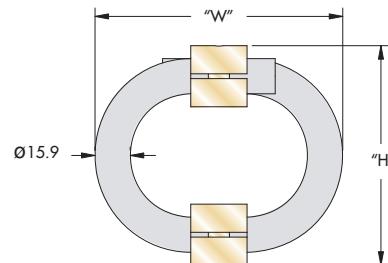
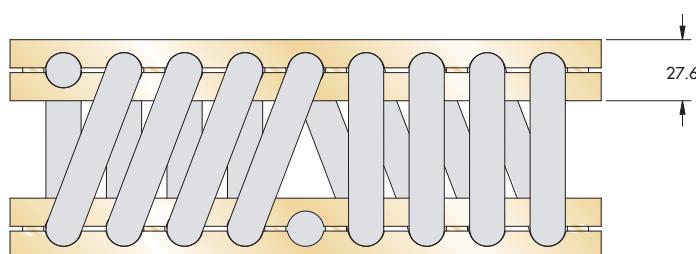
Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR16-200-08 | 2 936 | 33.0 | 294 | 294 |
| 2 | WR16-300-08 | 1 713 | 40.1 | 207 | 207 |
| 3 | WR16-400-08 | 1 557 | 45.2 | 173 | 173 |
| 4 | WR16-600-08 | 1 201 | 50.8 | 121 | 121 |
| 5 | WR16-700-08 | 801 | 56.9 | 81 | 81 |
| 6 | WR16-800-08 | 601 | 77.7 | 60 | 60 |
| 7 | WR16-850-08 | 445 | 90.9 | 46 | 46 |
| 8 | WR16-900-08 | 289 | 107.7 | 30 | 30 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are ±0.25mm



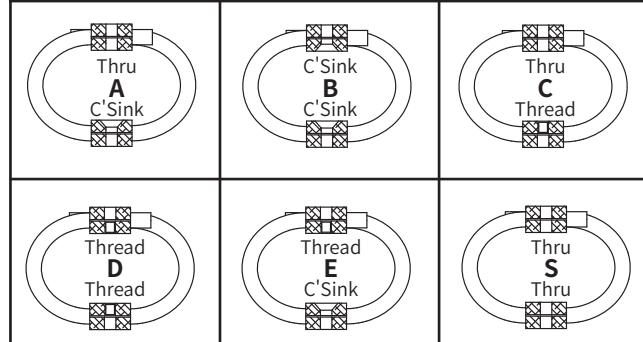
| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|----------|----------------------|---------------------|-------------------|--------------------------|------------------------|--------------|------------------|
| WR20-200 | 89 | ± 3.30 | 102 | C, D A, B, C, D, E, S | Ø11.0 + 0.13 - 0.38 | M10 X 1.5 | 90° |
| WR20-300 | 99 | | 112 | | | | |
| WR20-400 | 102 | | 121 | | | | |
| WR20-600 | 109 | | 135 | | | | |
| WR20-700 | 119 | | 152 | | | | |
| WR20-800 | 127 | | 165 | | | | |
| WR20-900 | 135 | | 178 | | | | |

Ordering Example

WR20 - 400 - 8 D H M

- Add "M" for Metric
- Threaded Hole Options
 - *[] -Tapped
 - [H] -Helical Insert, Free Running
 - [L] -Helical Insert, Self Locking
- Mounting Options See chart
- Number of Loops 8 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

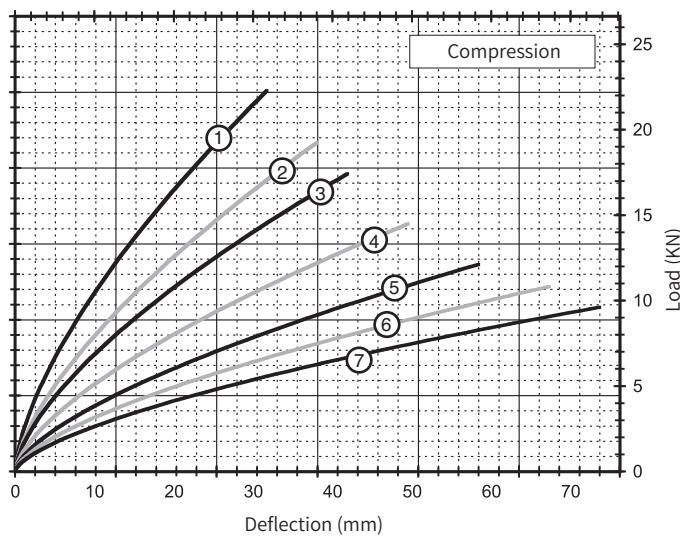
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 50 Nm.
- Operating Temperature Range:-100°C~260°C

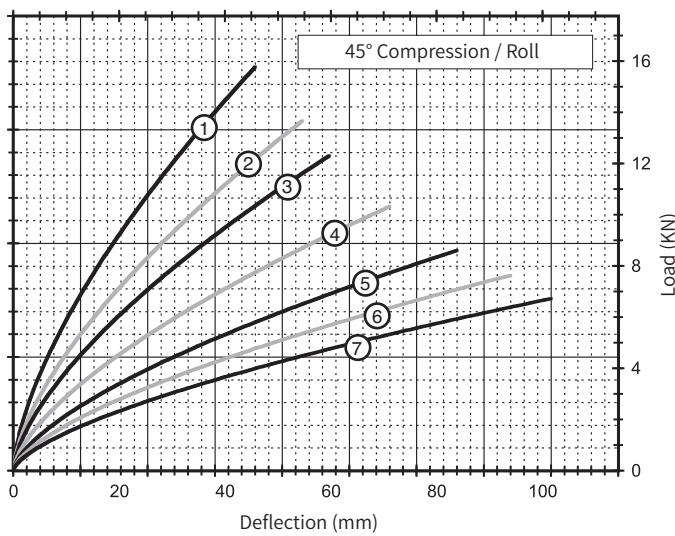
Static Load vs Deflection



Compression

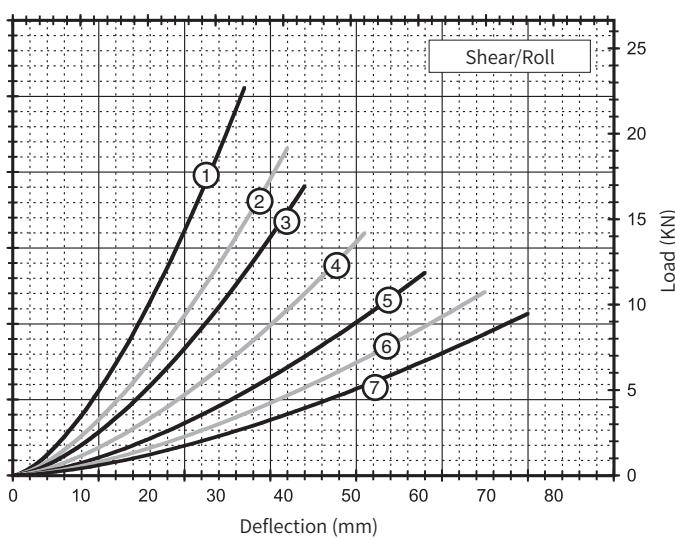
| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR20-200-08 | 6 450 | 31.8 | 1 676 | 849 |
| 2 | WR20-300-08 | 5 471 | 38.1 | 1 259 | 609 |
| 3 | WR20-400-08 | 5 071 | 41.9 | 1 105 | 504 |
| 4 | WR20-600-08 | 4 204 | 49.5 | 821 | 356 |
| 5 | WR20-700-08 | 3 514 | 58.4 | 616 | 252 |
| 6 | WR20-800-08 | 3 180 | 67.3 | 511 | 196 |
| 7 | WR20-900-08 | 2 802 | 73.7 | 427 | 159 |

WR



45° Compression / Roll

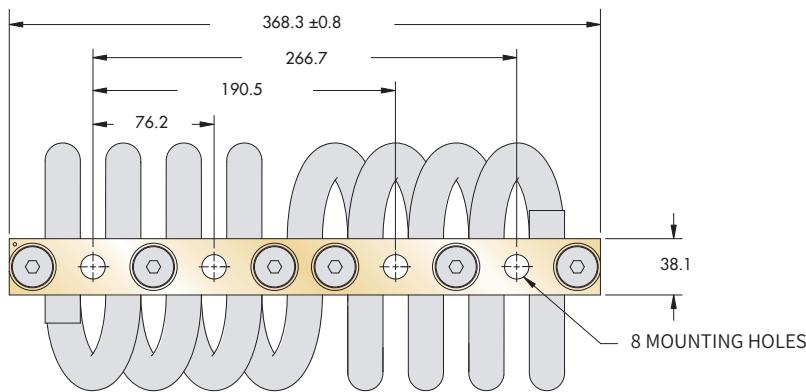
| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR20-200-08 | 4 537 | 45.7 | 951 | 419 |
| 2 | WR20-300-08 | 3 981 | 54.6 | 741 | 305 |
| 3 | WR20-400-08 | 3 581 | 59.7 | 627 | 250 |
| 4 | WR20-600-08 | 2 980 | 71.1 | 468 | 177 |
| 5 | WR20-700-08 | 2 491 | 83.8 | 350 | 124 |
| 6 | WR20-800-08 | 2 246 | 94.0 | 285 | 98 |
| 7 | WR20-900-08 | 1 979 | 101.6 | 238 | 81 |



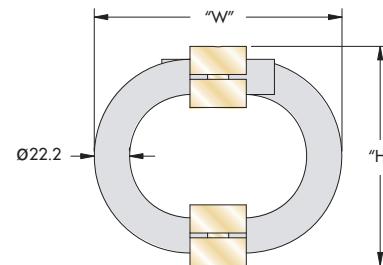
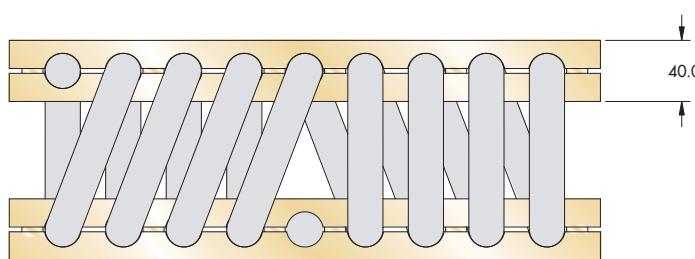
Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | Kv (Vibration) kN/m | Ks (Shock) kN/m |
|-------|-------------|--------------------|--------------------|---------------------|-----------------|
| 1 | WR20-200-08 | 3 514 | 34.3 | 524 | 524 |
| 2 | WR20-300-08 | 3 025 | 40.6 | 375 | 375 |
| 3 | WR20-400-08 | 2 624 | 43.2 | 308 | 308 |
| 4 | WR20-600-08 | 2 135 | 52.1 | 215 | 215 |
| 5 | WR20-700-08 | 1 512 | 61.0 | 152 | 152 |
| 6 | WR20-800-08 | 1 223 | 69.9 | 123 | 123 |
| 7 | WR20-900-08 | 979 | 76.2 | 98 | 98 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are ±0.25mm



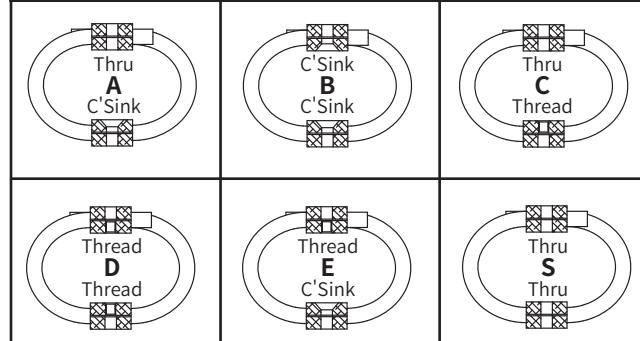
| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|----------|----------------------|---------------------|-------------------|--------------------------|----------------------|--------------|------------------|
| WR28-200 | 133 | ± 3.35 | 140 | C, D A, B, C, D, E, S | Ø13.5 +0.13 -0.38 | M12 X 1.75 | 90° |
| WR28-400 | 152 | | 165 | | | | |
| WR28-600 | 159 | | 178 | | | | |
| WR28-800 | 191 | | 210 | | | | |
| WR28-900 | 216 | | 235 | | | | |
| WR28-950 | 216 | | 286 | | | | |

Ordering Example

WR28 - 400 - 8 D H M

- Add "M" for Metric
- Threaded Hole Options
 - *[] -Tapped
 - [H] -Helical Insert, Free Running
 - [L] -Helical Insert, Self Locking
- Mounting Options See chart
- Number of Loops 8 (Reduced Number of Loops Available)
- Isolator Size See Sizing Table

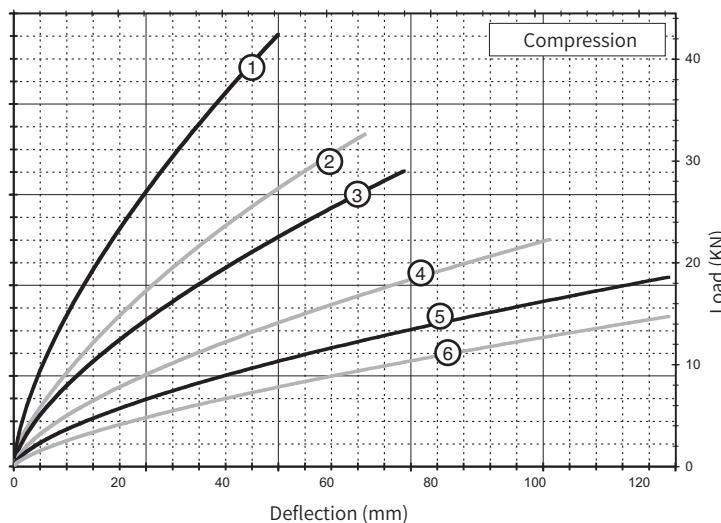
Mounting Options



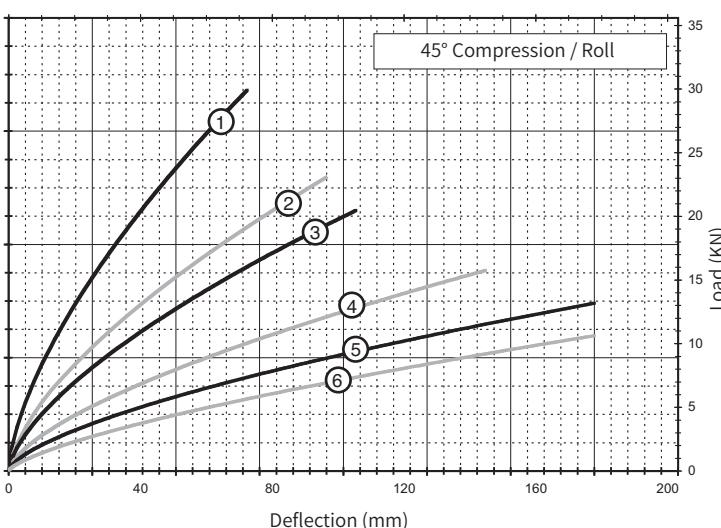
*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 100 Nm.
- Operating Temperature Range:-100°C~260°C

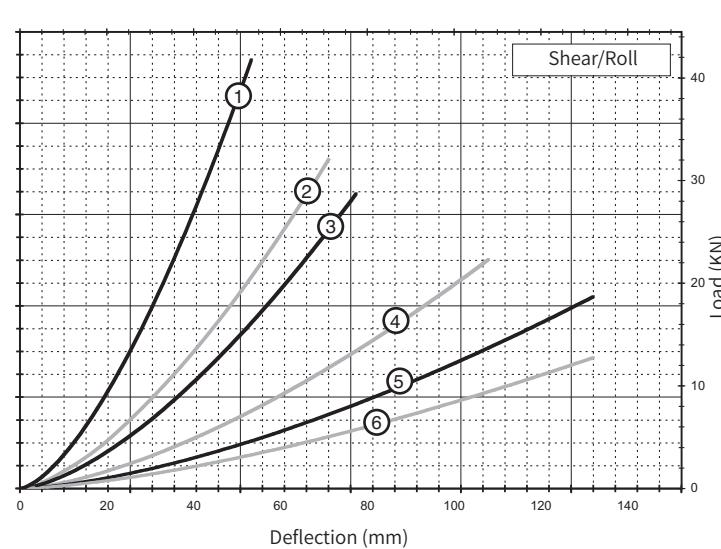
Static Load vs Deflection



Compression

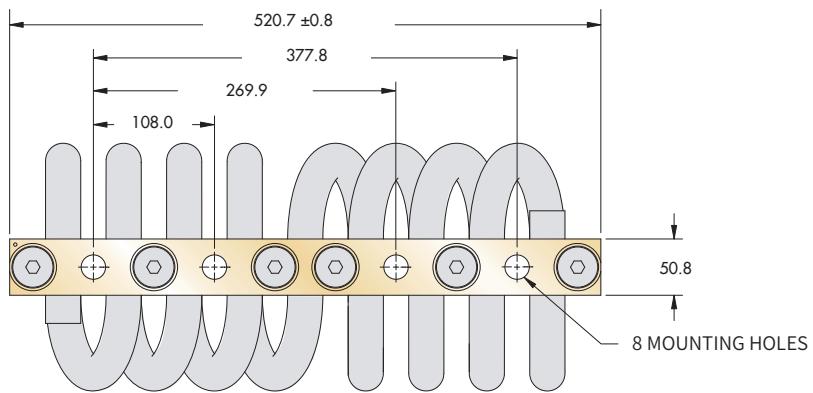


45° Compression / Roll

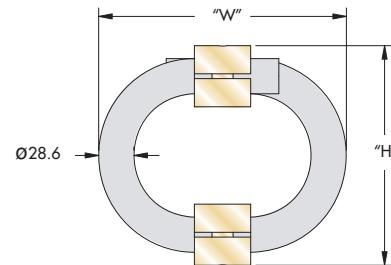
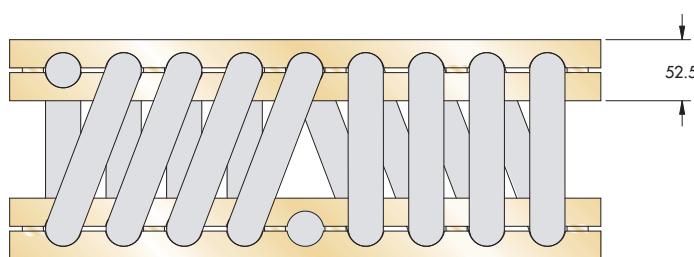


Shear/Roll

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are $\pm 0.25\text{mm}$



| Model | Height ("H") mm | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|----------|----------------------|---------------------|-------------------|---------------------|--|--------------|------------------|
| WR36-200 | 178 | ± 6.35 | 216 | A, B, C, D, E, S | $\varnothing 19.8$ $+0.13$ -0.38 | M18 X 2.5 | 90° |
| WR36-400 | 216 | | 241 | | | | |
| WR36-600 | 235 | | 260 | | | | |

Ordering Example

WR36 - 400 - 8 D H M

Add "M" for Metric

Threaded Hole Options

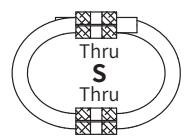
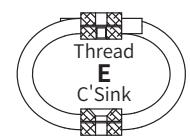
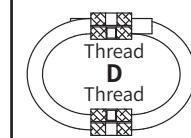
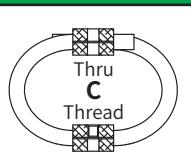
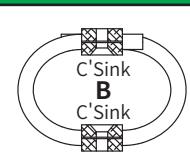
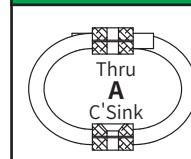
- *[] -Tapped
- [H] -Helical Insert, Free Running
- [L] -Helical Insert, Self Locking

Mounting Options See chart

Number of Loops 8 (Reduced
Number of Loops Available)

Isolator Size See Sizing Table

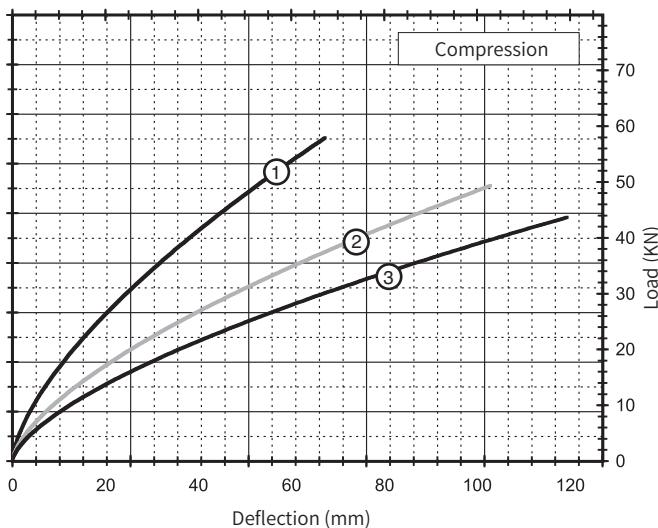
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

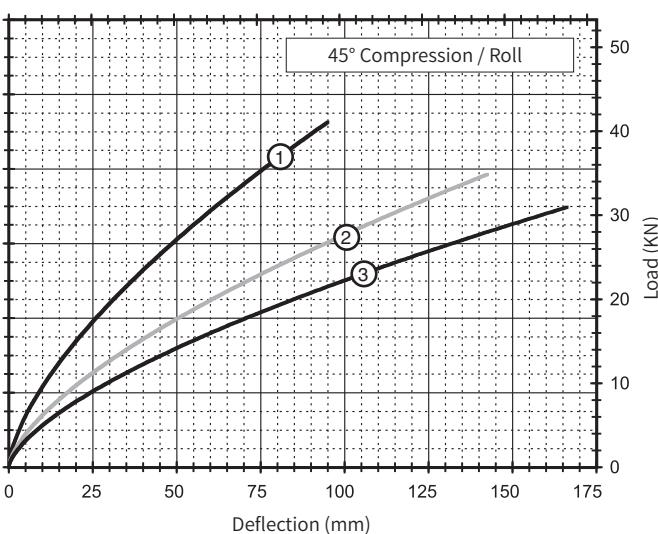
- Maximum recommended torque for standard threaded insert is 300 Nm.
- Operating Temperature Range:-100°C~260°C

Static Load vs Deflection

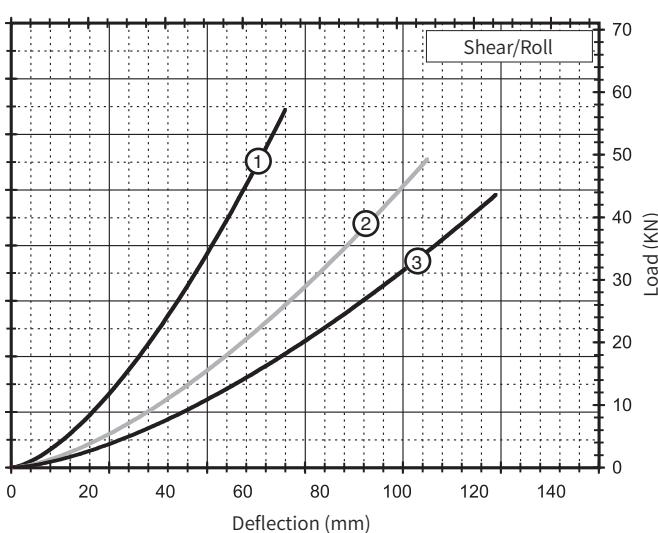


Compression

| Curve | Model | Max. Static Load KN | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|-------------|---------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR36-200-08 | 16.86 | 67.3 | 2 706 | 1 044 |
| 2 | WR36-400-08 | 14.50 | 102.9 | 1 774 | 583 |
| 3 | WR36-600-08 | 12.77 | 119.4 | 1 415 | 445 |



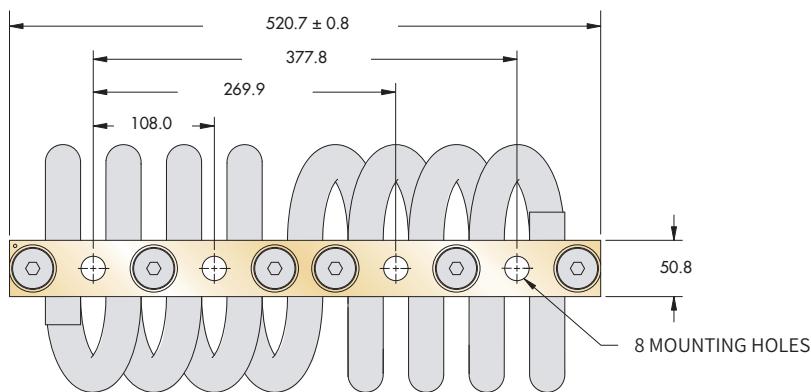
45° Compression / Roll



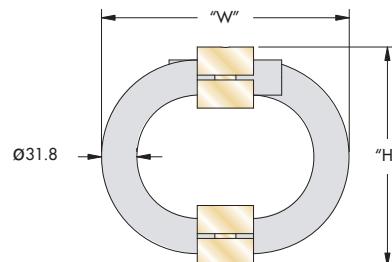
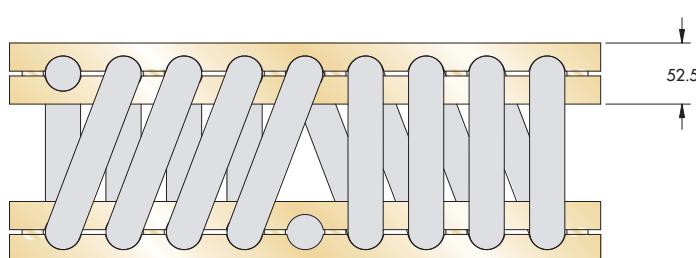
Shear/Roll

| Curve | Model | Max. Static Load KN | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|-------------|---------------------|--------------------|---------------------------------|-----------------------------|
| 1 | WR36-200-08 | 6.32 | 71.1 | 636 | 636 |
| 2 | WR36-400-08 | 3.60 | 108.0 | 361 | 361 |
| 3 | WR36-600-08 | 2.74 | 125.7 | 275 | 275 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



Note: Dimensions are in mm /
Tolerances are ±0.25mm



| Model | Height ("H") mm | | Width (Ref) mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|----------|----------------------|--------|---------------------|-------------------|---------------------|---------------------------|--------------|------------------|
| WR40-200 | 178 | ± 6.35 | 210 | 24.0 | A, B, C, D, E, S | Ø19.8 + 0.13 - 0.38 | M18 X 2.5 | |
| WR40-400 | 216 | | 248 | 27.2 | | | | 90° |

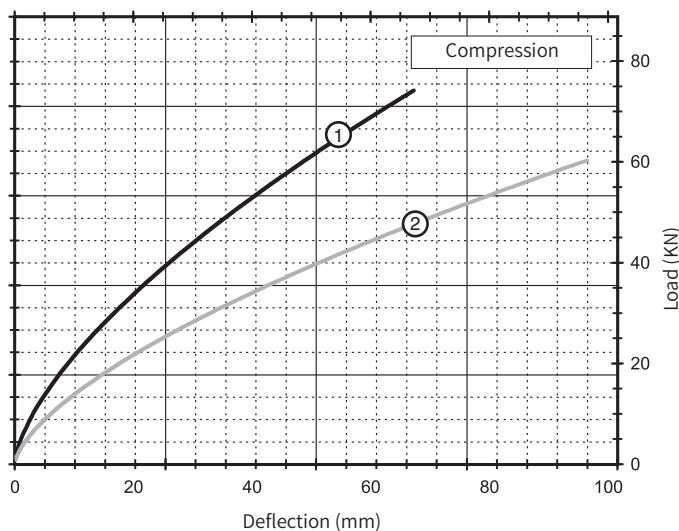
| Ordering Example | | |
|------------------|------|---|
| WR40 | -400 | -8 D H M |
| | | Add "M" for Metric |
| | | Threaded Hole Options |
| | | *[] -Tapped |
| | | [H] -Helical Insert, Free Running |
| | | [L] -Helical Insert, Self Locking |
| | | Mounting Options See chart |
| | | Number of Loops 8 (Reduced Number of Loops Available) |
| | | Isolator Size See Sizing Table |

| Mounting Options | | |
|-----------------------|-----------------------|---------------------|
| Thru A C'Sink | C'Sink B C'Sink | Thru C Thread |
| Thread D Thread | Thread E C'Sink | Thru S Thru |

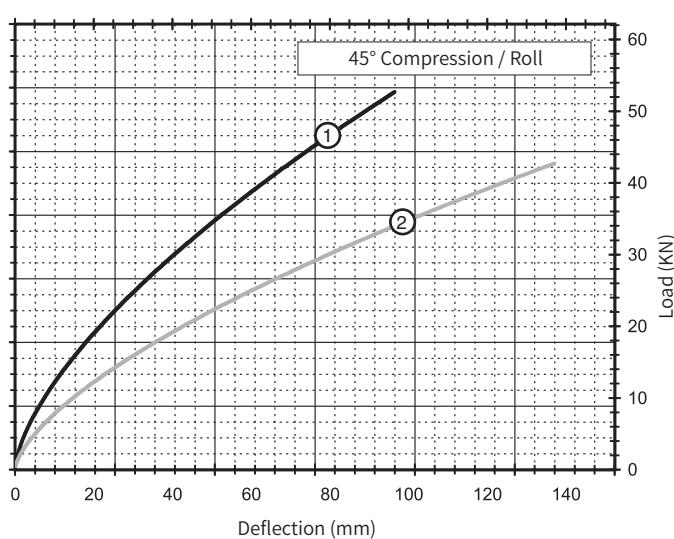
*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for standard threaded insert is 300 Nm.
- Operating Temperature Range:-100°C~260°C

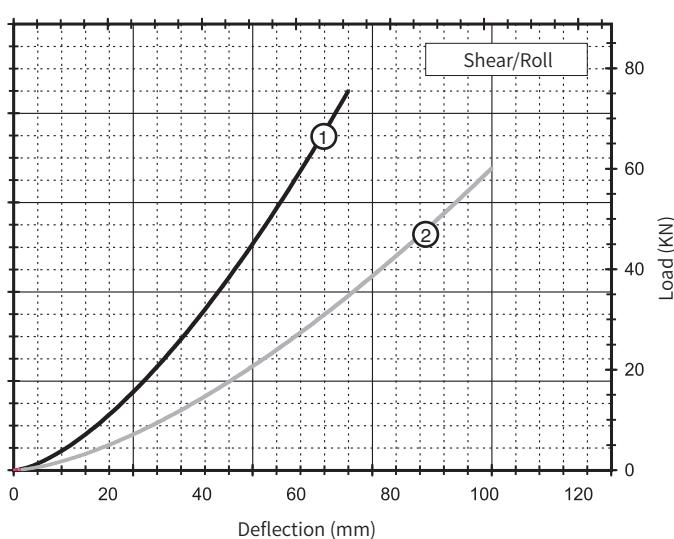
Static Load vs Deflection



Compression

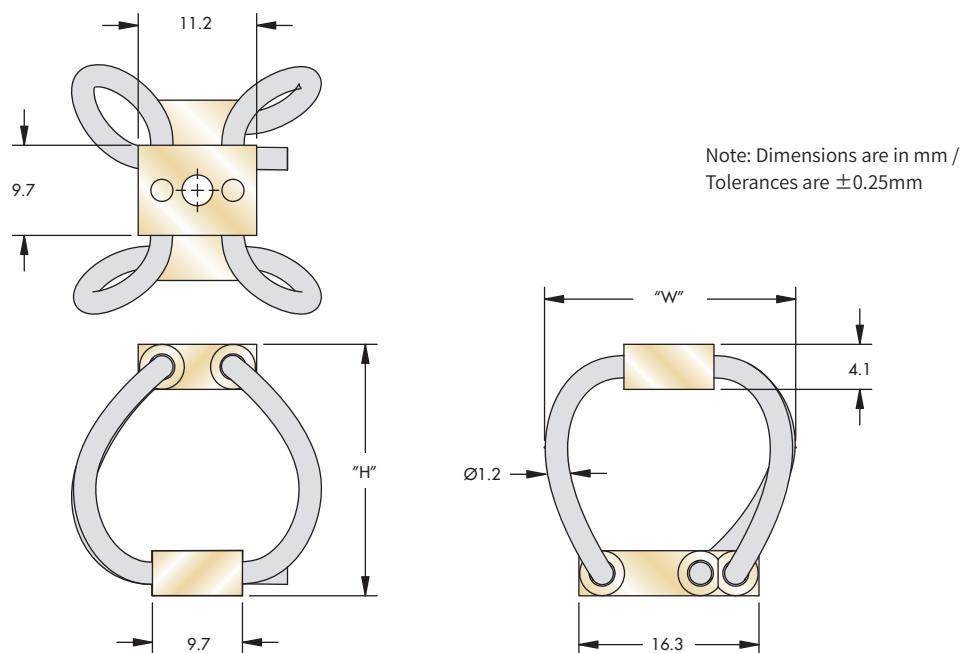


45° Compression / Roll



Shear/Roll

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



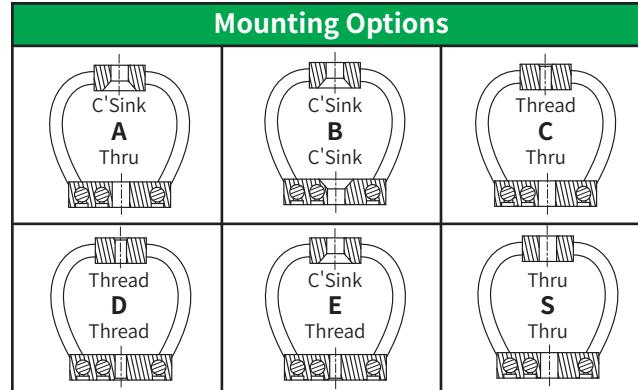
| Model | Height ("H") mm | Width (Ref) "W" mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|----------------------------|-------------------|---------------------|------------|--------------|------------------|
| CR1-100 | 17 | ± 1.52 | 19 | A, B, C, D, E, S | Ø3.30 | M3 X 0.5 | 90° |
| CR1-200 | 19 | | 20 | | | | |
| CR1-300 | 23 | | 23 | | | | |
| CR1-400 | 26 | | 26 | | | | |

Ordering Example

CR1 - 400 - D M

- Add "M" for Metric
- Mounting Options See chart
- Isolator Size See Sizing Table

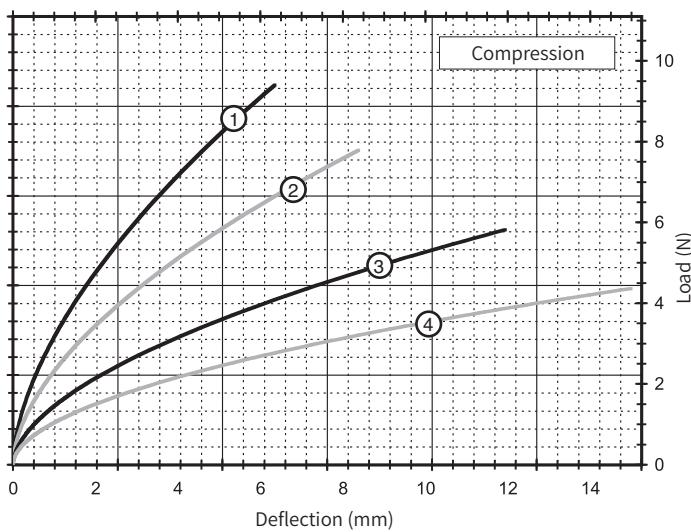
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for tapped aluminum bar is 1.2 Nm.
- Wire Rope Material: Stranded 300 series stainless steel
- Operating Temperature Range:-100°C~260°C

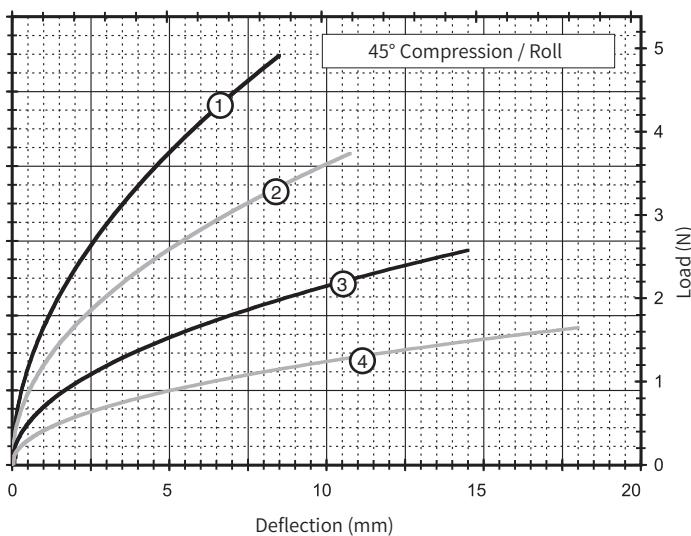
Static Load vs Deflection



Compression

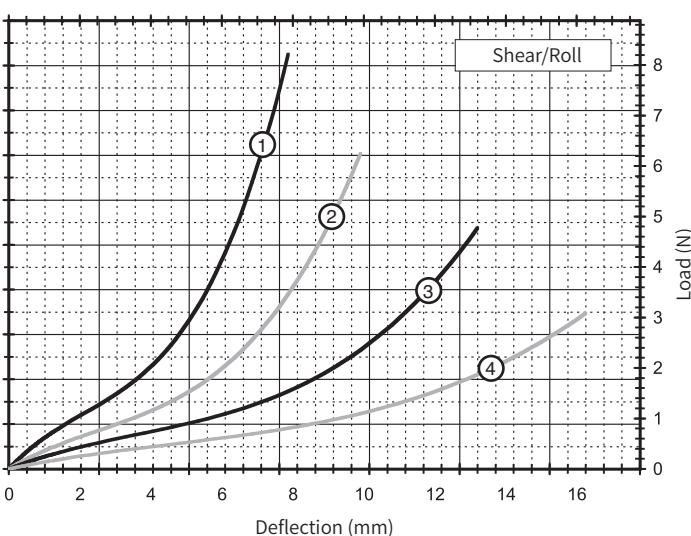
| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|---------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | CR1-100 | 3.3 | 6.4 | 3.9 | 1.9 |
| 2 | CR1-200 | 2.4 | 8.4 | 2.8 | 1.2 |
| 3 | CR1-300 | 1.8 | 11.9 | 1.75 | 0.61 |
| 4 | CR1-400 | 1.3 | 15.0 | 1.31 | 0.39 |

CR



45° Compression / Roll

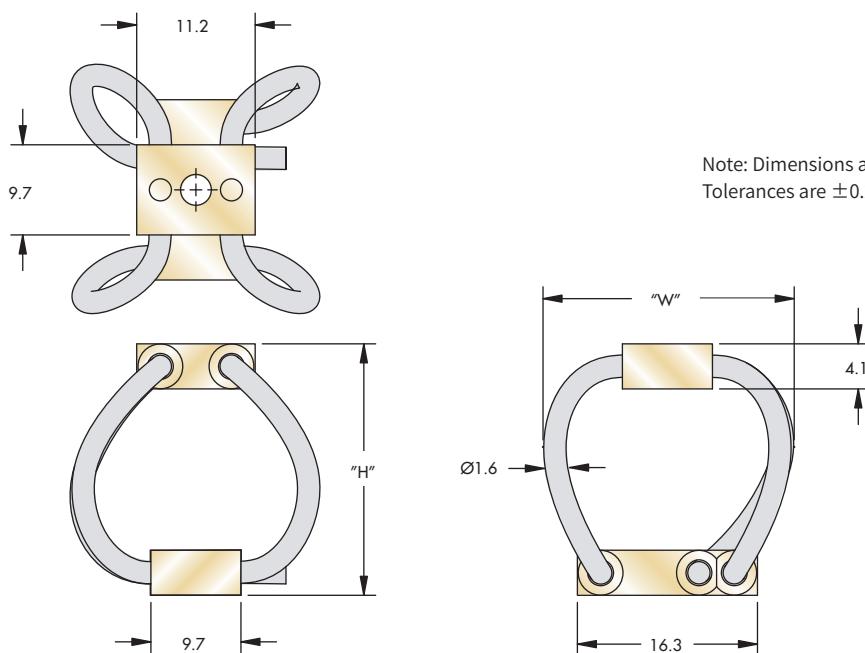
| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|---------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | CR1-100 | 1.6 | 8.6 | 2.1 | 0.79 |
| 2 | CR1-200 | 1.1 | 10.9 | 1.5 | 0.44 |
| 3 | CR1-300 | 0.76 | 14.7 | 0.88 | 0.26 |
| 4 | CR1-400 | 0.49 | 18.3 | 0.53 | 0.12 |



Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|---------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | CR1-100 | 1.1 | 7.9 | 0.70 | 0.70 |
| 2 | CR1-200 | 0.89 | 9.9 | 0.44 | 0.44 |
| 3 | CR1-300 | 0.71 | 13.2 | 0.26 | 0.26 |
| 4 | CR1-400 | 0.53 | 16.3 | 0.13 | 0.13 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



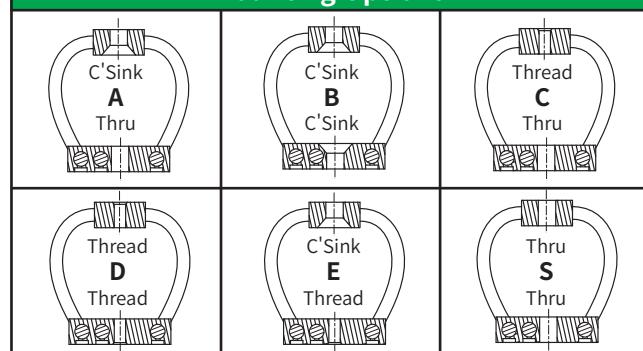
| Model | Height ("H") mm | Width (Ref) "W" mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|----------------------------|-------------------|---------------------|------------|--------------|------------------|
| CR2-100 | 16 | ± 1.52 | 20 | A, B, C, D, E, S | 03.30 | M3 X 0.5 | 90° |
| CR2-200 | 19 | | 21 | | | | |
| CR2-300 | 23 | | 24 | | | | |
| CR2-400 | 27 | | 27 | | | | |

Ordering Example

CR2 - 400 - D M

- Add "M" for Metric
- Mounting Options See chart
- Isolator Size See Sizing Table

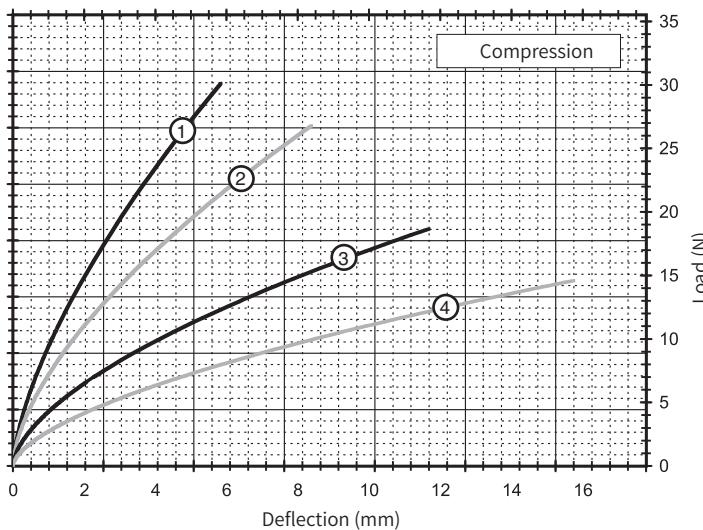
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for tapped aluminum bar is 1.2 Nm.
- Wire Rope Material: Stranded 300 series stainless steel
- Operating Temperature Range: -100°C~260°C

Static Load vs Deflection

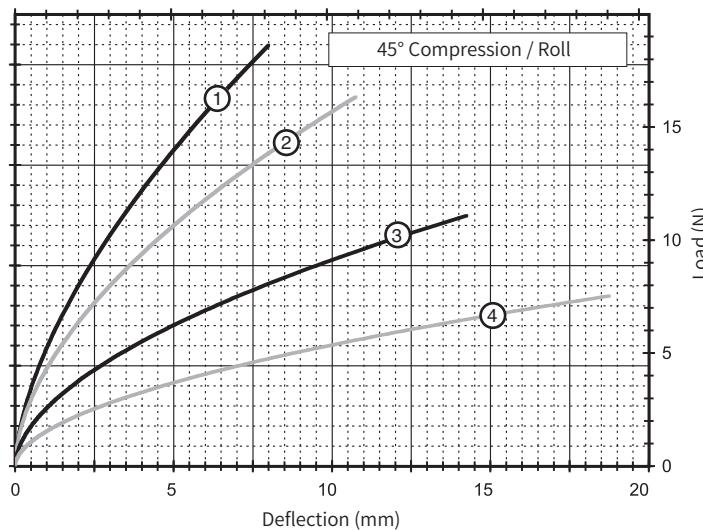


Compression

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|---------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | CR2-100 | 12 | 5.8 | 11 | 6.1 |
| 2 | CR2-200 | 9.3 | 8.4 | 8.8 | 4.0 |
| 3 | CR2-300 | 6.7 | 11.7 | 5.3 | 1.9 |
| 4 | CR2-400 | 4.9 | 15.7 | 3.5 | 1.2 |

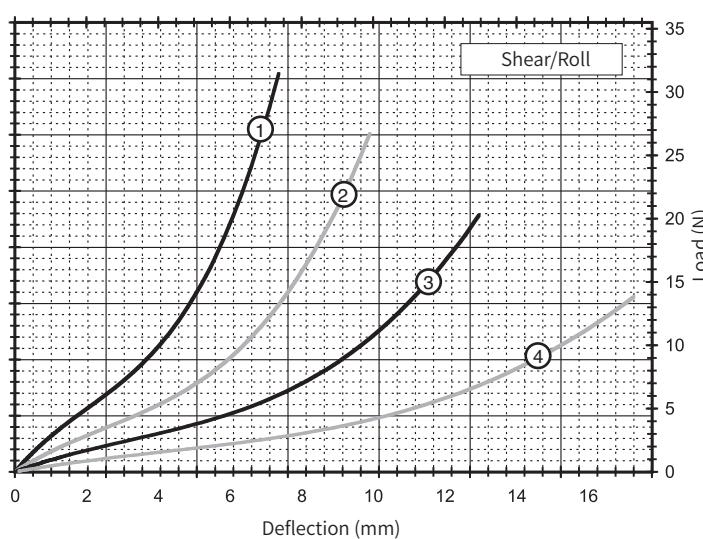
CR

45° Compression / Roll

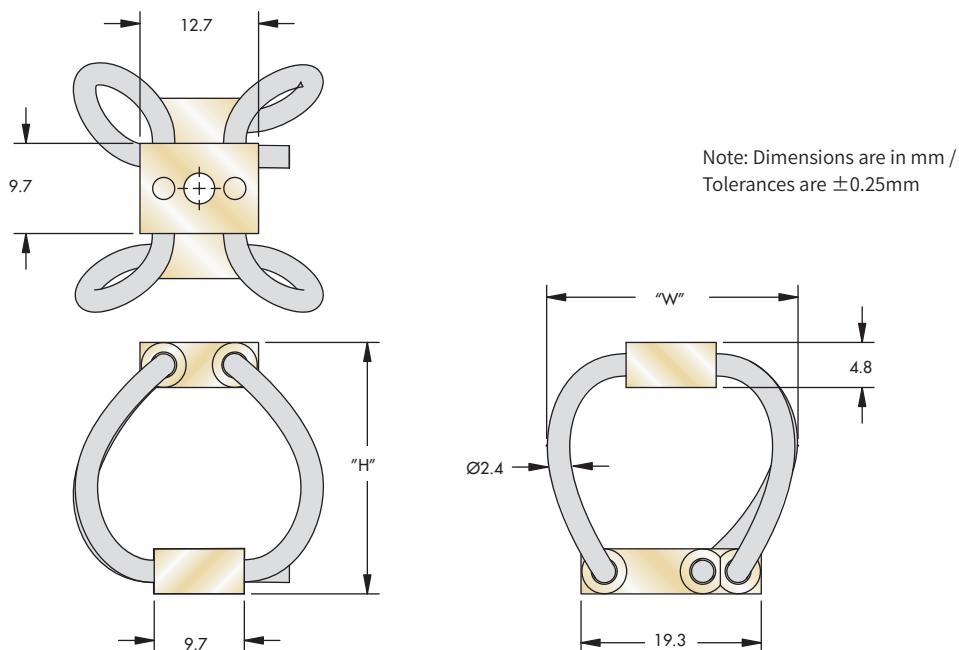


Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|---------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | CR2-100 | 5.6 | 7.4 | 3.0 | 3.0 |
| 2 | CR2-200 | 4.0 | 9.9 | 1.8 | 1.8 |
| 3 | CR2-300 | 2.9 | 13.0 | 1.1 | 1.1 |
| 4 | CR2-400 | 2.0 | 17.3 | 0.53 | 0.53 |



Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



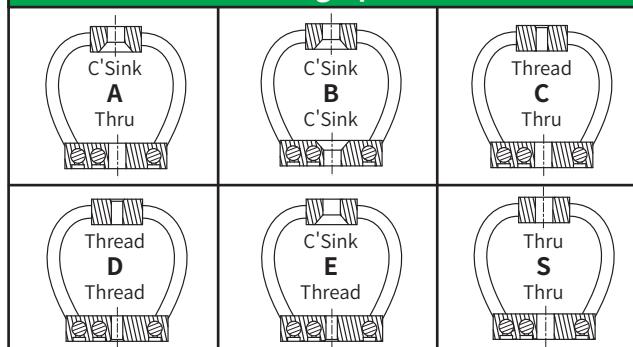
| Model | Height ("H") mm | Width (Ref) "W" mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|----------------------------|-------------------|---------------------|------------|--------------|------------------|
| CR3-100 | 19 | ± 1.52 | 22 | A, B, C, D, E, S | Ø3.30 | M3 X 0.5 | 90° |
| CR3-200 | 23 | | 24 | | | | |
| CR3-300 | 27 | | 27 | | | | |
| CR3-400 | 33 | | 30 | | | | |

Ordering Example

CR3 - 400 - D M

- Add "M" for Metric
- Mounting Options See chart
- Isolator Size See Sizing Table

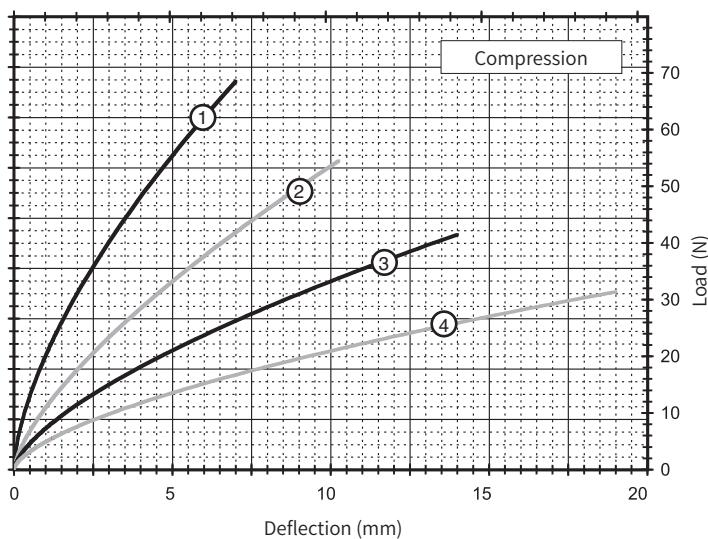
Mounting Options



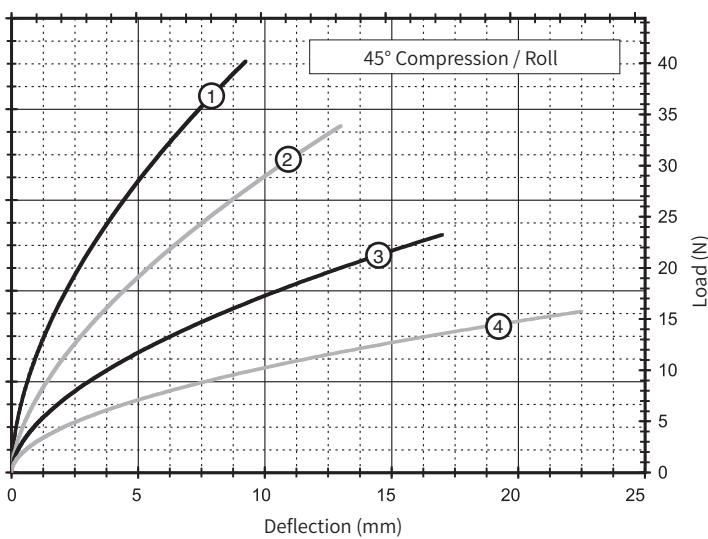
*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for tapped aluminum bar is 1.5 Nm.
- Wire Rope Material: Stranded 300 series stainless steel
- Operating Temperature Range:-100°C~260°C

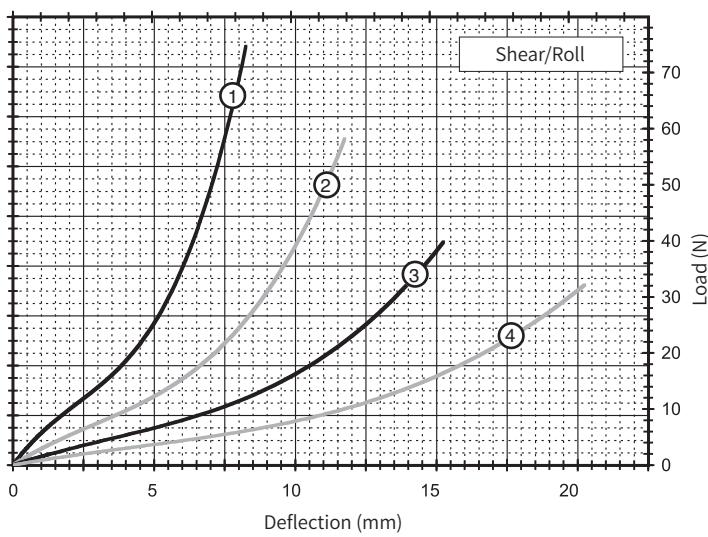
Static Load vs Deflection



Compression

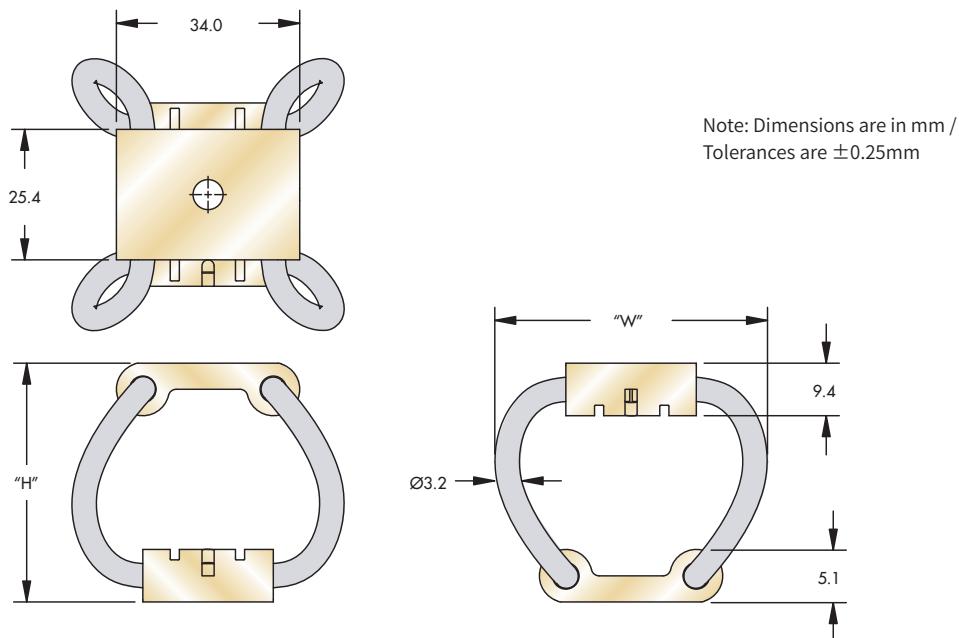


45° Compression / Roll



Shear/Roll

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



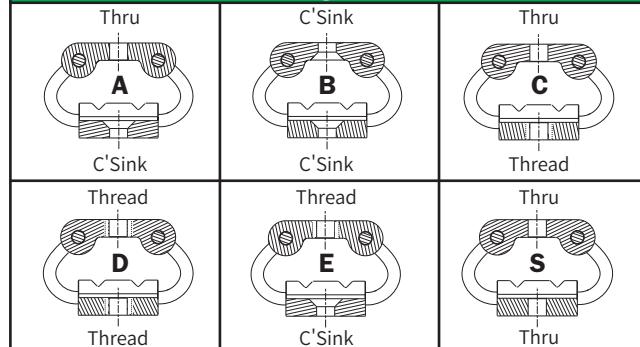
| Model | Height ("H") mm | Width (Ref) "W" mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|----------------------------|-------------------|---------------------|------------|--------------|------------------|
| CR4-100 | 42 | ± 1.52 | 40 | A, B, C, D, E, S | Ø7.00 | M6 X 1.0 | 90° |
| CR4-200 | 53 | | 40 | | | | |
| CR4-300 | 60 | | 43 | | | | |
| CR4-400 | 75 | | 48 | | | | |

Ordering Example

CR4 - 400 - D M

- Add "M" for Metric
- Mounting Options See chart
- Isolator Size See Sizing Table

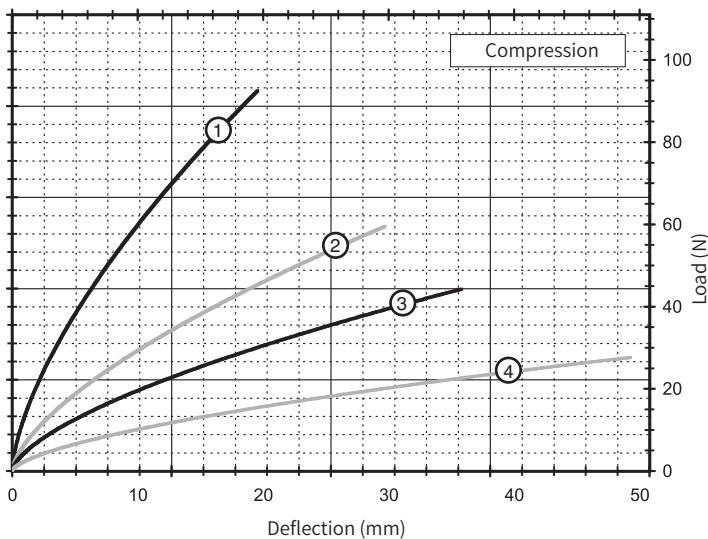
Mounting Options



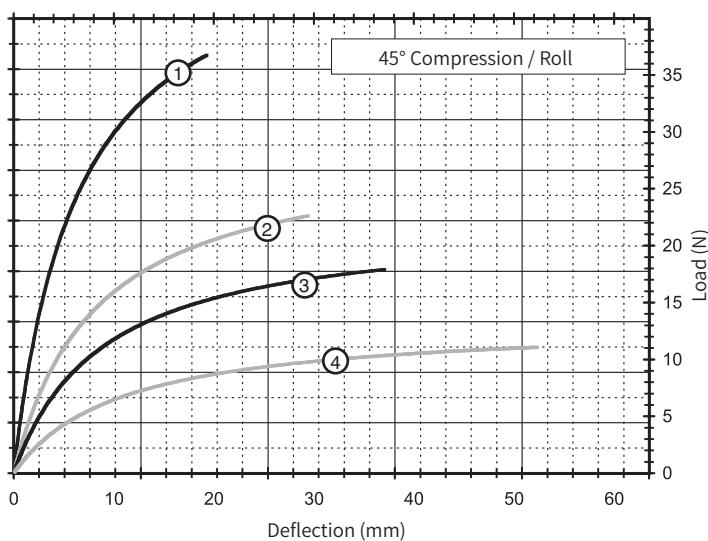
*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for tapped aluminum bar is 7.5 Nm.
- Wire Rope Material: Stranded 300 series stainless steel
- Operating Temperature Range:-100°C~260°C

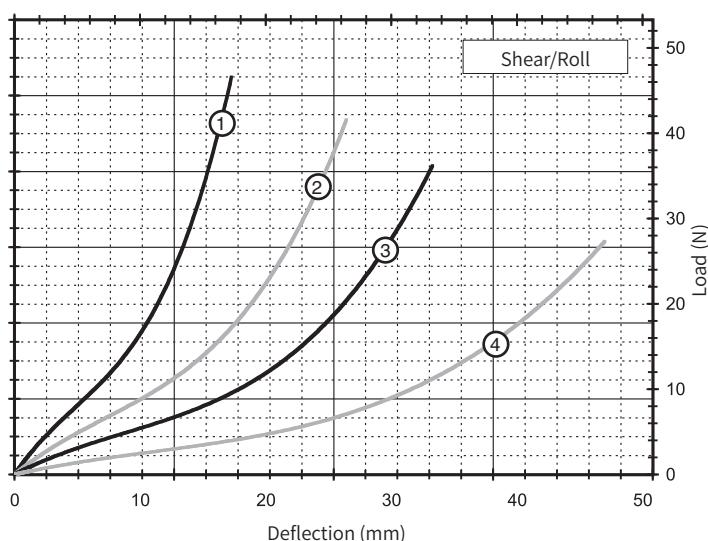
Static Load vs Deflection



Compression

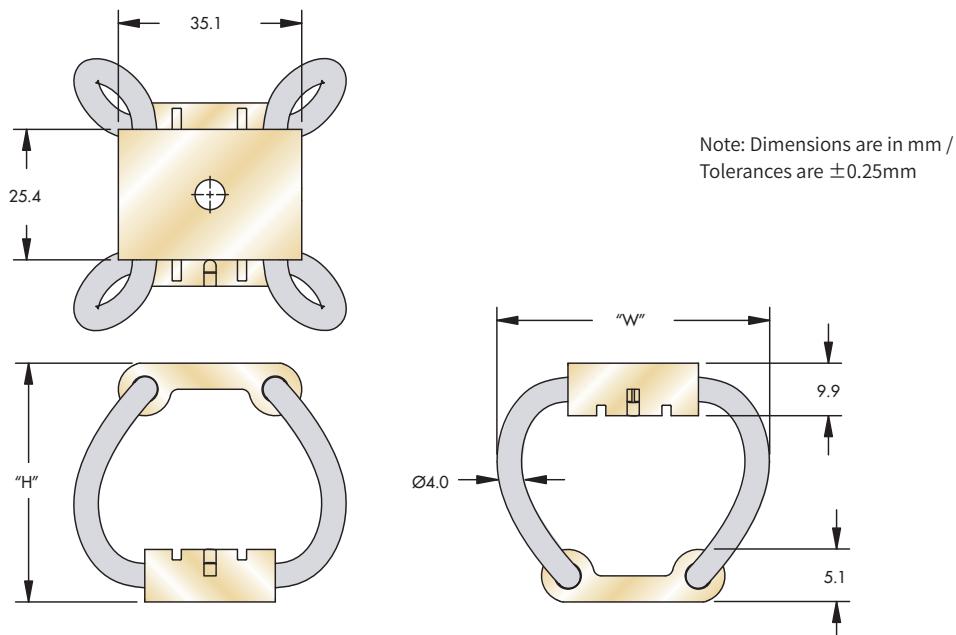


45° Compression / Roll



Shear/Roll

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



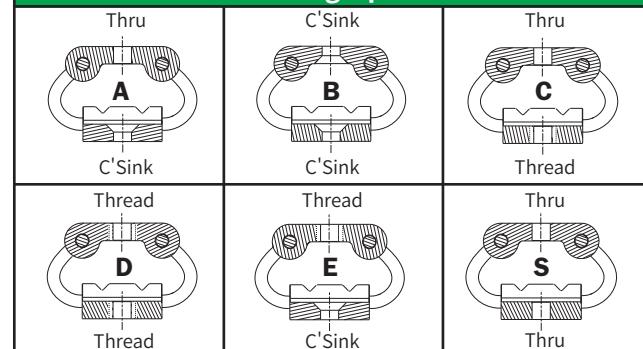
| Model | Height ("H") mm | Width (Ref) "W" mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|----------------------------|-------------------|---------------------|------------|--------------|------------------|
| CR5-100 | 41 | ± 1.52 | 45 | A, B, C, D, E, S | Ø7.00 | M6 X 1.0 | 90° |
| CR5-200 | 53 | | 48 | | | | |
| CR5-300 | 60 | | 51 | | | | |
| CR5-400 | 76 | | 57 | | | | |

Ordering Example

CR5 - 400 - D M

- Add "M" for Metric
- Mounting Options See chart
- Isolator Size See Sizing Table

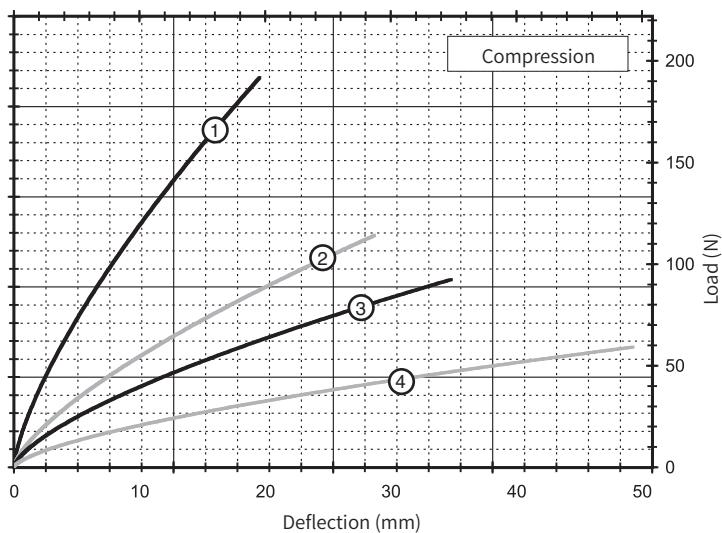
Mounting Options



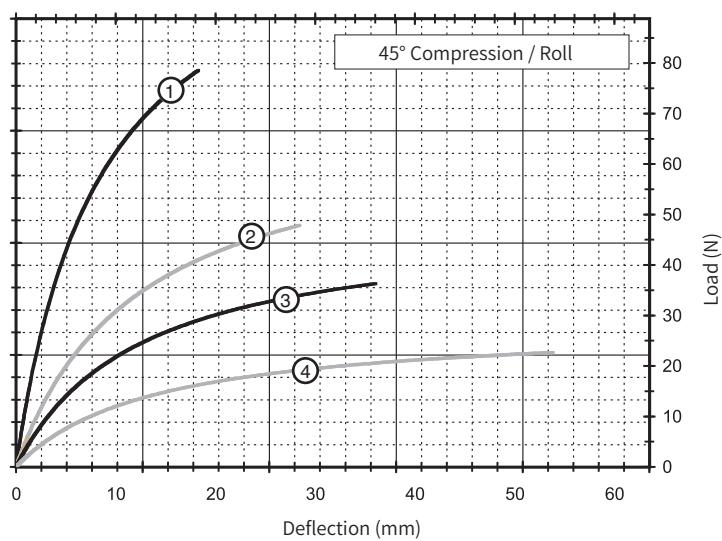
*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for tapped aluminum bar is 7.5 Nm.
- Wire Rope Material: Stranded 300 series stainless steel
- Operating Temperature Range:-100°C~260°C

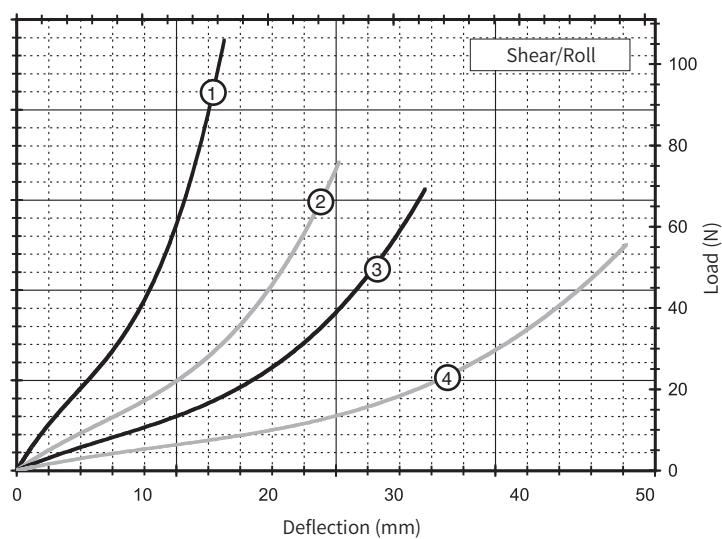
Static Load vs Deflection



Compression

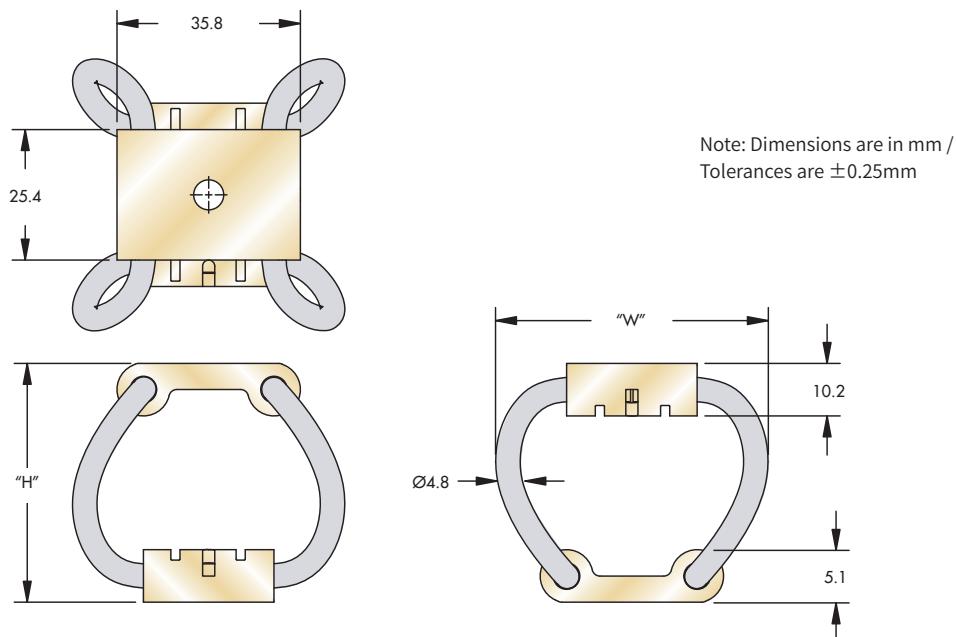


45° Compression / Roll



Shear/Roll

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.



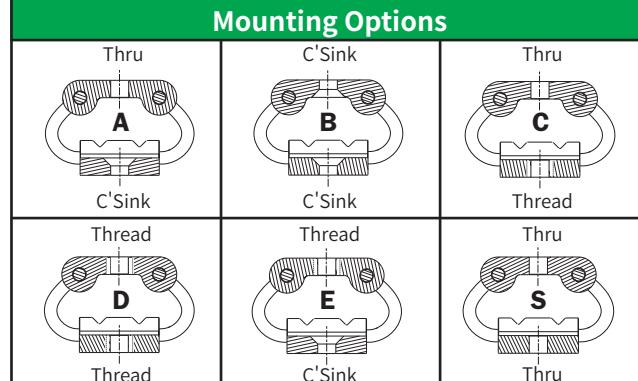
| Model | Height ("H") mm | Width (Ref) "W" mm | Unit Weight Kg | Mounting Options | Thru mm | Thread mm | C'Sink Metric |
|---------|----------------------|----------------------------|-------------------|---------------------|------------|--------------|------------------|
| CR6-100 | 47 | ± 1.52 | 57 | A, B, C, D, E, S | Ø7.00 | M6 X 1.0 | 90° |
| CR6-200 | 55 | | 62 | | | | |
| CR6-300 | 64 | | 65 | | | | |
| CR6-400 | 79 | | 74 | | | | |

Ordering Example

CR6 - 400 - D M

- Add “M” for Metric
- Mounting Options See chart
- Isolator Size See Sizing Table

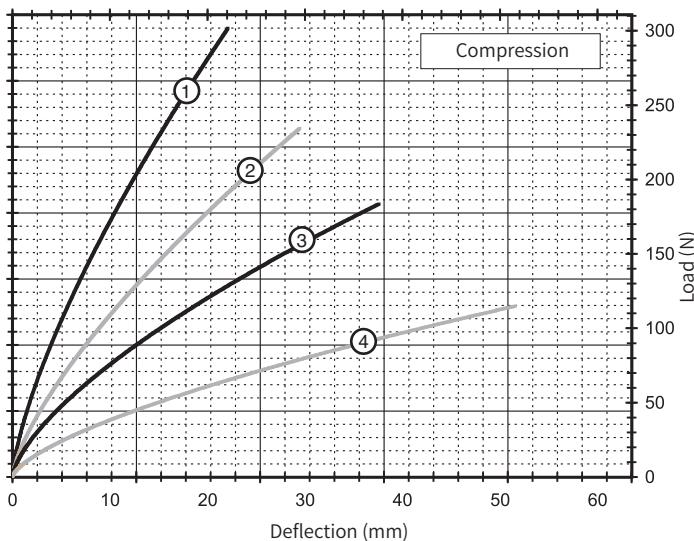
Mounting Options



*Standard characteristics. Delivery time may be postponed for non-standard products.

- Maximum recommended torque for tapped aluminum bar is 7.5 Nm.
- Wire Rope Material: Stranded 300 series stainless steel
- Operating Temperature Range:-100°C~260°C

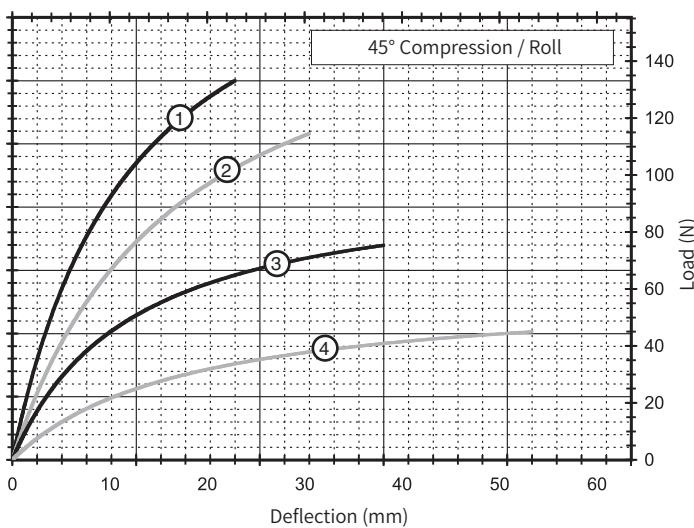
Static Load vs Deflection



Compression

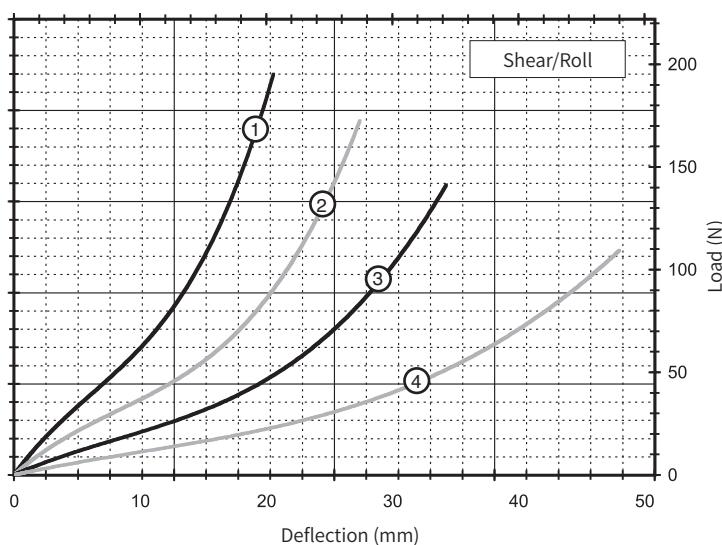
| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|---------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | CR6-100 | 142 | 22.1 | 32 | 16 |
| 2 | CR6-200 | 93 | 29.5 | 20 | 9.6 |
| 3 | CR6-300 | 67 | 37.6 | 15 | 5.3 |
| 4 | CR6-400 | 36 | 51.6 | 7.9 | 2.6 |

CR



45° Compression / Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|---------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | CR6-100 | 40 | 22.9 | 16 | 7.9 |
| 2 | CR6-200 | 33 | 30.5 | 9.6 | 5.3 |
| 3 | CR6-300 | 22 | 38.1 | 7.9 | 2.8 |
| 4 | CR6-400 | 13 | 53.3 | 3.5 | 1.2 |



Shear/Roll

| Curve | Model | Max. Static Load N | Max. Deflection mm | K _v (Vibration) kN/m | K _s (Shock) kN/m |
|-------|---------|--------------------|--------------------|---------------------------------|-----------------------------|
| 1 | CR6-100 | 40 | 20.6 | 7.9 | 7.9 |
| 2 | CR6-200 | 31 | 27.4 | 4.4 | 4.4 |
| 3 | CR6-300 | 22 | 34.3 | 2.6 | 2.6 |
| 4 | CR6-400 | 16 | 48.0 | 1.6 | 1.6 |

Note: Performance provided for full loop models with standard (302/304) stainless steel cable. Please consult EKD company for other options. Do not extrapolate curves.

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