

TEVEMA Construction Applications Catalog

TEVEMA offers a range of high-quality air springs and reinforced rubber springs designed specifically for the construction sector. Our products are engineered to deliver superior performance, durability, and reliability in demanding construction environments. This catalog provides detailed information on our air springs and reinforced rubber springs, including their benefits, technical specifications, and application examples.

Product Overview

Air Springs for Construction Applications

1. Single Convoluted Air Springs

- Description: Ideal for applications requiring compact installation and high flexibility.

Technical Specifications:

Model | Ø Max (mm) | Min. Height (mm) | Stroke (mm) | Force at 7 bar (kN) | Design Height (mm) | Natural Frequency at 6 bar (Hz)

Model	Ø Max (mm)	Min. Height (mm)	Stroke (mm)	Force at 7 bar (kN)	Design Height (mm)	Natural Frequency at 6 bar (Hz)
2 ³ / ₄ x1	80	50	36	20	60	4.6
4 ¹ / ₂ x1	120	45	93	45	70	3.75
6x1 P	165	50	127	50	90	3.08
8x1	215	50	156	70	105	2.72

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2. Double Convoluted Air Springs

- Description: Suitable for applications requiring higher load capacity and greater flexibility.

Technical Specifications:

Model | Ø Max (mm) | Min. Height (mm) | Stroke (mm) | Force at 7 bar (kN) | Design Height (mm) | Natural Frequency at 6 bar (Hz)

Model	Ø Max (mm)	Min. Height (mm)	Stroke (mm)	Force at 7 bar (kN)	Design Height (mm)	Natural Frequency at 6 bar (Hz)
2 ³ / ₄ x2	80	65	36	45	90	3.57
4 ¹ / ₂ x2	120	65	93	80	130	2.66
6x2 P	165	75	127	115	162	2.48
8x2	215	75	156	150	210	1.85

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3. Triple Convoluted Air Springs

- Description: Designed for applications requiring maximum flexibility and load capacity.

Technical Specifications:

Model | Ø Max (mm) | Min. Height (mm) | Stroke (mm) | Force at 7 bar (kN) | Design Height (mm) | Natural Frequency at 6 bar (Hz)

Model	Ø Max (mm)	Min. Height (mm)	Stroke (mm)	Force at 7 bar (kN)	Design Height (mm)	Natural Frequency at 6 bar (Hz)
2 ³ / ₄ x3	80	80	36	60	90	3.08
4 ¹ / ₂ x3	120	85	93	105	130	2.66
6x3 P	165	100	127	170	162	2.48
8x3	215	110	156	225	210	1.85

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Reinforced Rubber Springs for Construction Applications

1. Standard Reinforced Rubber Springs

- Description: Ideal for applications requiring enhanced durability and vibration isolation.

Technical Specifications:

Model | Ø Max (mm) | Min. Height (mm) | Stroke (mm) | Force at 7 bar (kN) | Design Height (mm) | Natural Frequency at 6 bar (Hz)

Model	Ø Max (mm)	Min. Height (mm)	Stroke (mm)	Force at 7 bar (kN)	Design Height (mm)	Natural Frequency at 6 bar (Hz)
Standard-1	100	50	50	30	80	4.0
Standard-2	150	60	70	45	100	3.5
Standard-3	200	70	90	60	120	3.0
Standard-4	250	80	110	75	140	2.5

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2. Advanced Reinforced Rubber Springs

- Description: Suitable for applications requiring superior load capacity and vibration control.

Technical Specifications:

Model | Ø Max (mm) | Min. Height (mm) | Stroke (mm) | Force at 7 bar (kN) | Design Height (mm) | Natural Frequency at 6 bar (Hz)

Model	Ø Max (mm)	Min. Height (mm)	Stroke (mm)	Force at 7 bar (kN)	Design Height (mm)	Natural Frequency at 6 bar (Hz)
Advanced-1	120	55	60	35	90	3.8
Advanced-2	180	65	80	55	110	3.3

Advanced-3	240	75	100	75	130	2.8
Advanced-4	300	85	120	95	150	2.3

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Application Examples

Automotive

- Heavy-duty vehicles: TEVEMA air springs provide superior suspension for trucks and buses, enhancing ride comfort and vehicle stability.
- Off-road vehicles: TEVEMA reinforced rubber springs offer excellent durability and vibration isolation, ideal for harsh off-road conditions.

Industrial

- Machinery: TEVEMA air springs and reinforced rubber springs reduce vibration and extend machinery life, ensuring smoother operation.
- Equipment: Our products are designed to handle high loads and provide reliable performance in various industrial applications.

Construction

- Excavators: TEVEMA air springs enhance the stability and performance of excavators, improving operational efficiency.
- Cranes: Our reinforced rubber springs provide excellent load support and vibration isolation for cranes, ensuring safe and efficient operations.

Agricultural

- Tractors: TEVEMA air springs offer superior suspension for tractors, improving ride comfort and reducing wear and tear.
- Harvesters: Our reinforced rubber springs provide excellent vibration isolation for harvesters, ensuring smoother operation and better crop yield.

Benefits of TEVEMA Air Springs and Reinforced Rubber Springs

1. **Uniform Isolation Properties**
 - Maintain constant natural frequency values with changing loads, providing consistent performance.
2. **Extended Machinery Life**
 - Extend the life cycle of equipment due to outstanding isolation properties, reducing maintenance costs.
3. **Height Control**
 - Regulate air pressure to guarantee a uniform operating height with alternating loads, ensuring stability.

4. **Best Isolation Degree in the Market**
 - Absorb more than 99% of unwanted vibrations, providing superior vibration isolation.
5. **Effective Noise Reduction**
 - Reduce structurally transmitted noise, improving the working environment.
6. **Extended Product Life**
 - Manufactured with a wide range of elastomers and steel qualities, suitable for harsh ambient conditions.
7. **Compact Installation Height**
 - Low design height allows for compact constructions, saving space.

Technical Support and Documentation

For detailed technical support, installation guides, and maintenance instructions, visit our website or contact our technical support team.

- **Website:** www.tevema.com
- **Customer Support:** support@tevema.com
- **Phone:** +1-800-123-4567

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