

BM-100/IX

Second generation of HYBRID Dampers



SE-NOR has developed a unique product BM-100/IX

BM-100/IX; a damper in its most advanced form

To create this new range of dampers, we have needed a great dose of imagination and technological innovation. Rather than simply redesigning them, we have reinvented them inside and out, with a focus on elegance. The result is an incredible all-in-one damper, a work of art combined with a touch of engineering.

Movement stops

BM-100/IX; features **8** movement stabilisers, **4** at the bottom and another **4** at the top. Once the damper is activated, these stops act to limit the core's lateral and longitudinal movement, preventing sudden shifts when the equipment stops and starts.

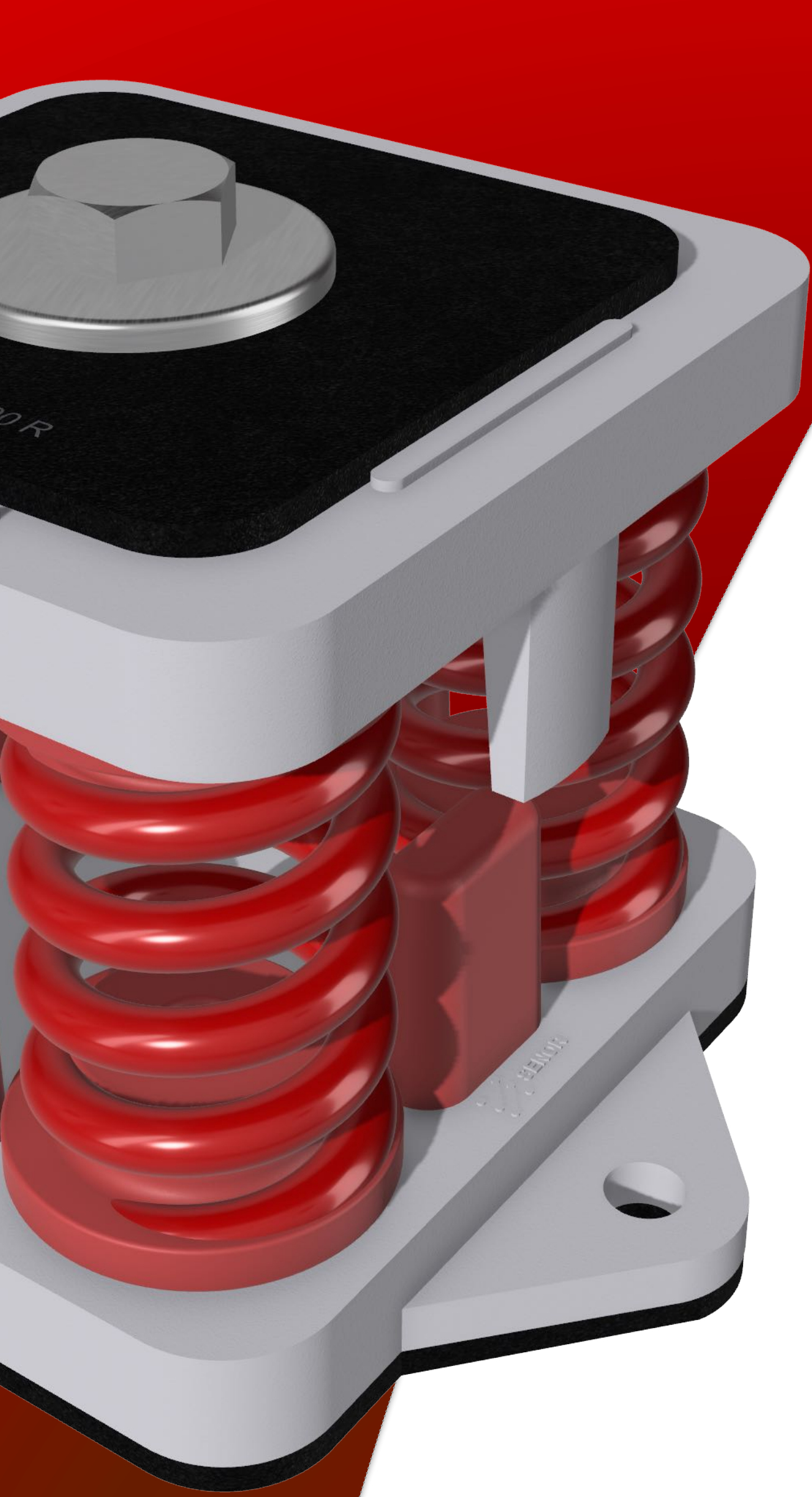
These are second-generation hybrid dampers offering higher concentrated performance. Their composite structure combines the best of the properties of '**steel coil springs**' with the damping capabilities of **KRAIBURG-TPE TC6EXN** polymer, in accordance with standard UNE-EN IXO 10846-1:2009.

The juxtaposition of these two components makes it possible to bring a unique damper to the market, thereby preventing the propagation of waves through the structure and reducing vibrations across the entire range of **exciting** frequencies.

Ideal for machines operating at speeds of **450 rpm** and above.



Movement control stops



Ref.
BM-100/IX 500 R

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Material properties

Polymer *KRAIBURG-TPE TC6EXN*

Property	Method	Unit	Result
Densidad	DIN EN ISO 1183-1	g/cm3	1190
Hardness	DIN ISO 7619-1	ShoreA	58
Traction resistance	DIN 53504/ISO 37	MPa	7.0
Resistance to tear	ISO 34-1 Methode B (b) (Graves)	N/mm	19.0
Elongation to break	DIN 53504/ISO 37	%	675

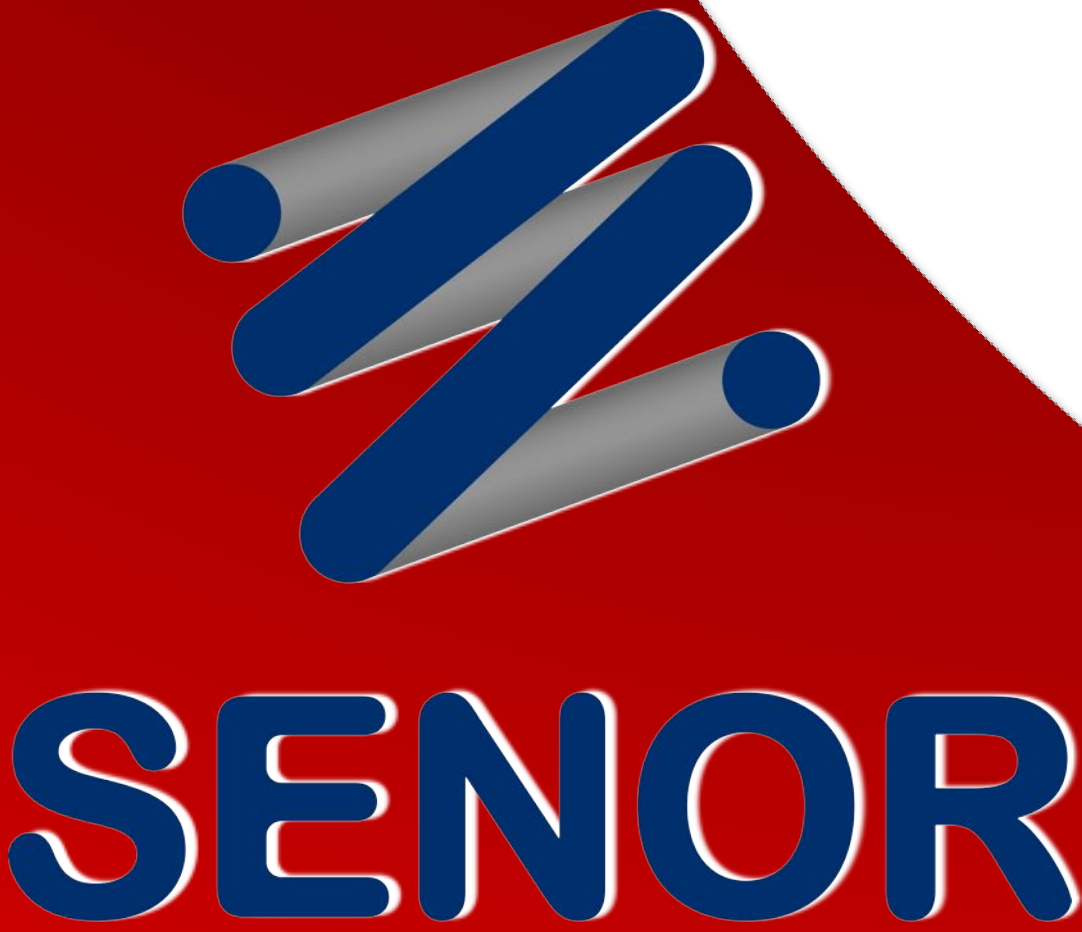
HELICOIDAL SYSTEM

	RED HELICAL SPRING
Property	Value
Wire diameter	5,6 mm
Active coil	4,3
Exterior Diameter	37 mm
Unloaded length	40,10 mm
Preload	500 N
Applied load	1200 N
Stiffness unit	115812

+ A core comprising four steel springs manufactured in accordance with **Standard DIN 2095**, which provide significant damping at low frequencies.

Anti-corrosion treatment; the springs are finished with powder coating treated with Interpon **700** anti-corrosion treatment.

BM-100/IX 500 R; all screws are supplied in stainless steel.



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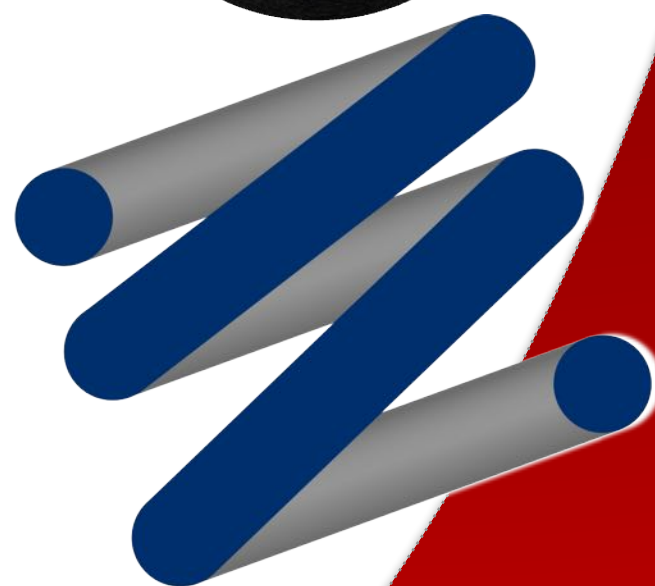
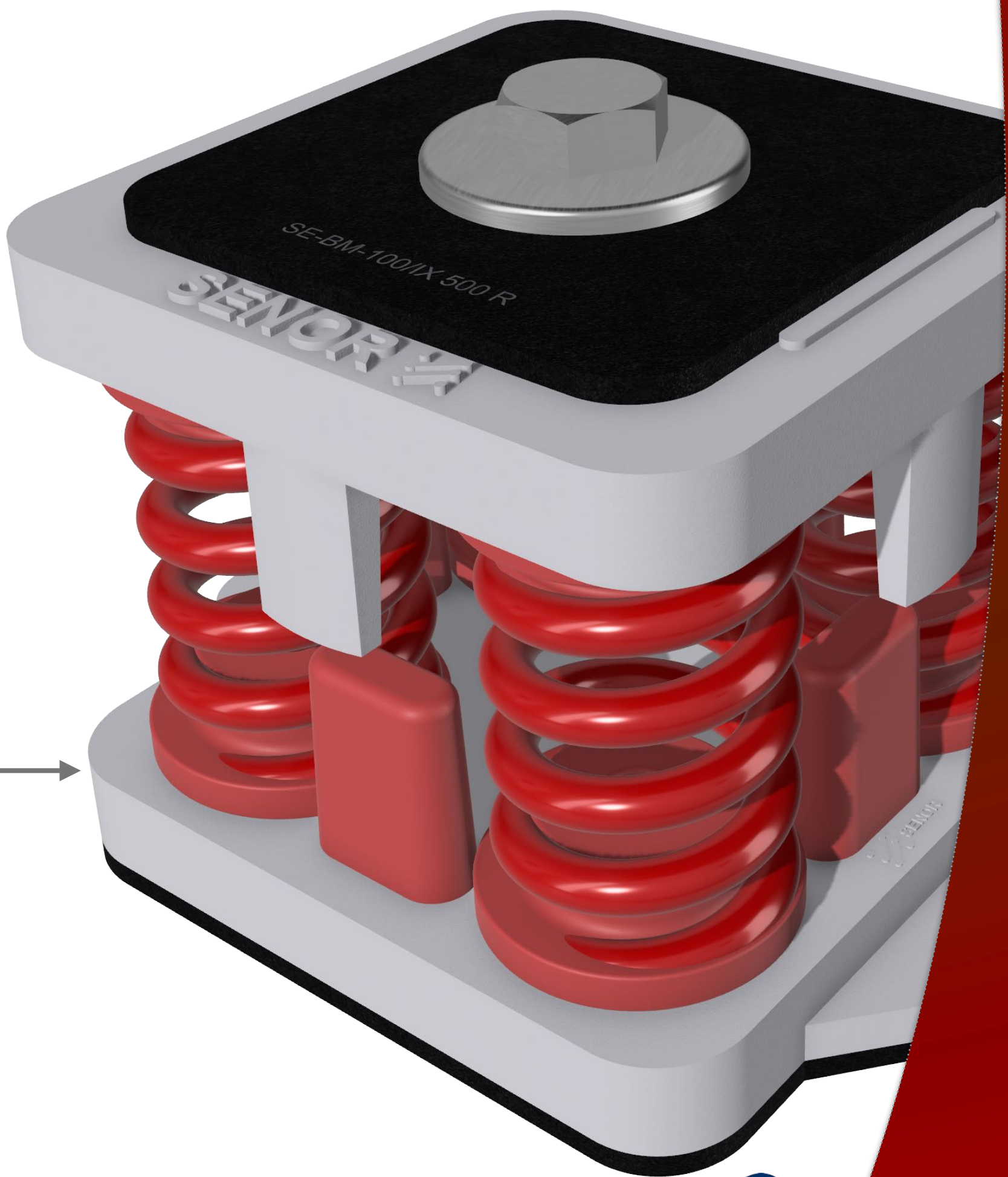
Zamak-5

Property	Value
Density	2712,000 kg/m ³
Coefficient of thermal expansion	0,000023 /C
Thermal conductivity	0,221 kW/m-C
Specific heat	920,000 J/kg-C
Module of elasticity	68947,570 MPa
Poison ratio	0,330
Elastic limit	27,579 MPa
Tensile strength	68,948 MPa
Elongation %	0,000

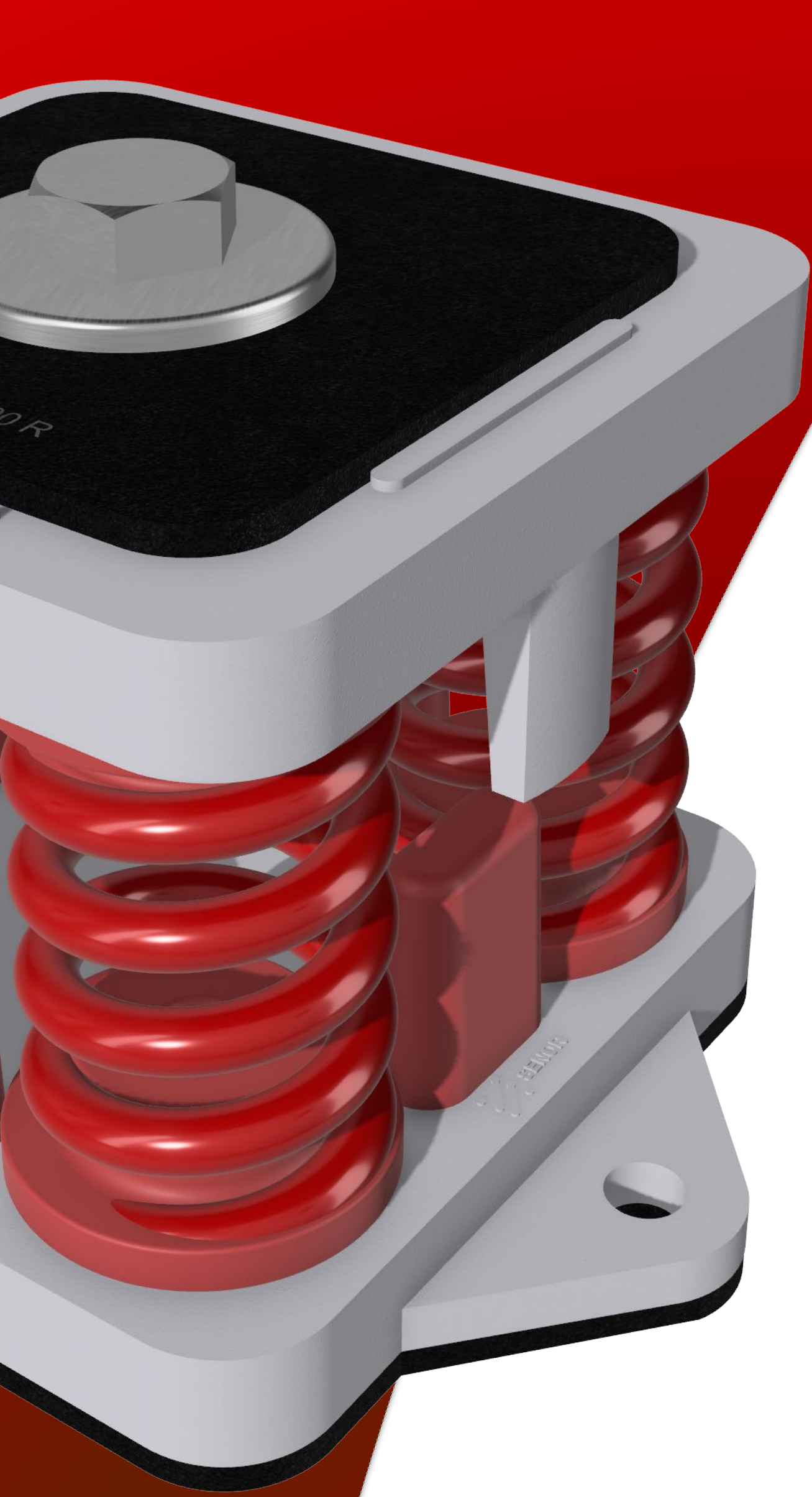
Material properties

← Manufactured from **ZAMAK-5** (an alloy of zinc, aluminium, magnesium and copper). It has high hardness, high traction resistance, a density of 6.6 g/cm³ and a melting point of 386°C, in **accordance with UNE-EN 12844**. Covered with **INTERPON 700** (epoxy and polyester resins) providing corrosion resistance of over **2000** hours in a salt environment.

Ref.
BM-100/IX 500R



SENIOR



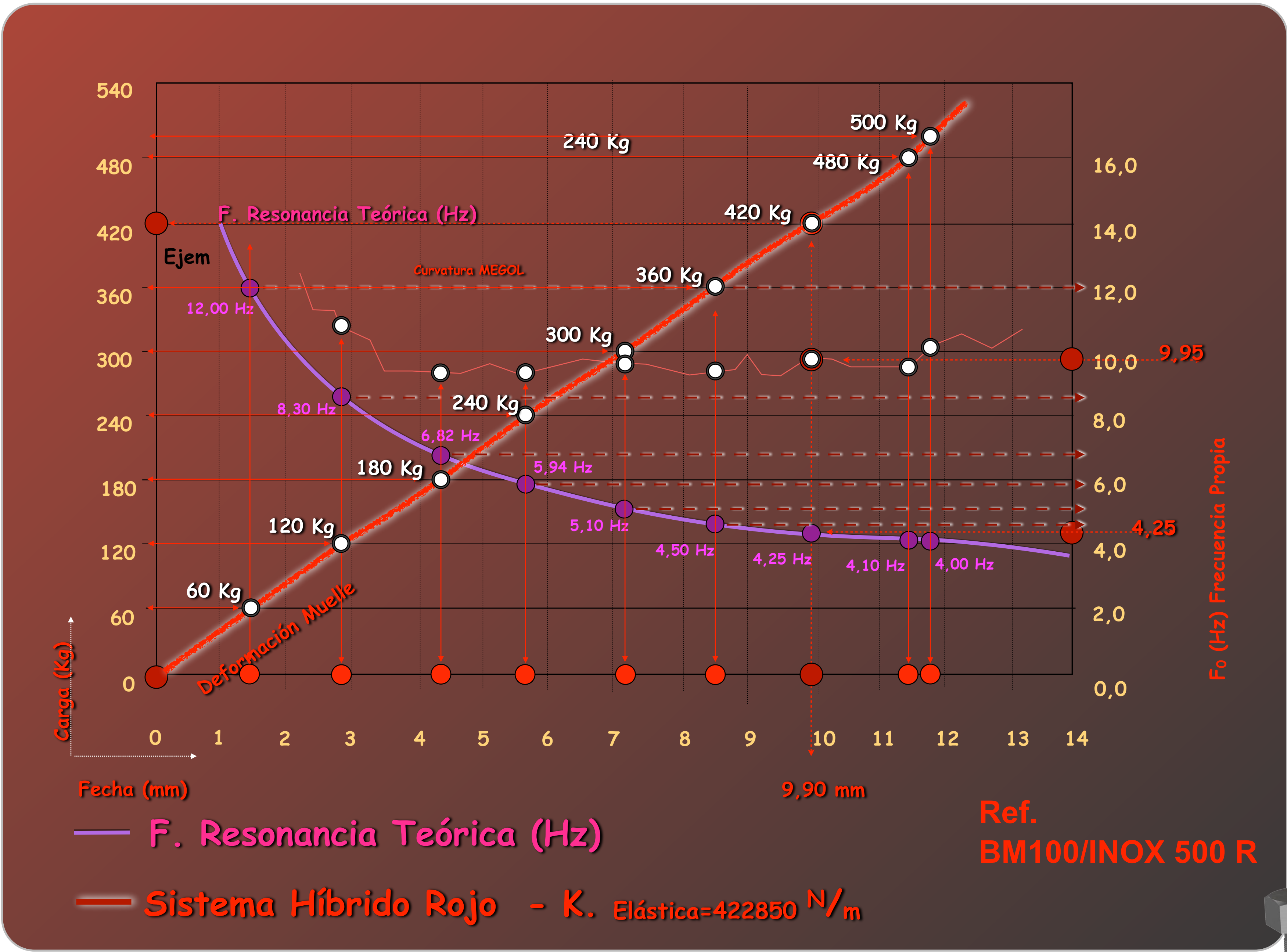
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Technical Specifications

Model Reference	Maximum Permissible Load (Kg)	Deflection (mm)	Spring Rate (KN/m)	Natural Frequency (Hz)*
SE-BM-100/IX 500 R	500	11,90	422,8	4,00

SENOR has developed this new range to mitigate this problem that arises in the welfare society in which we live. “Induced noise. Vibrations”

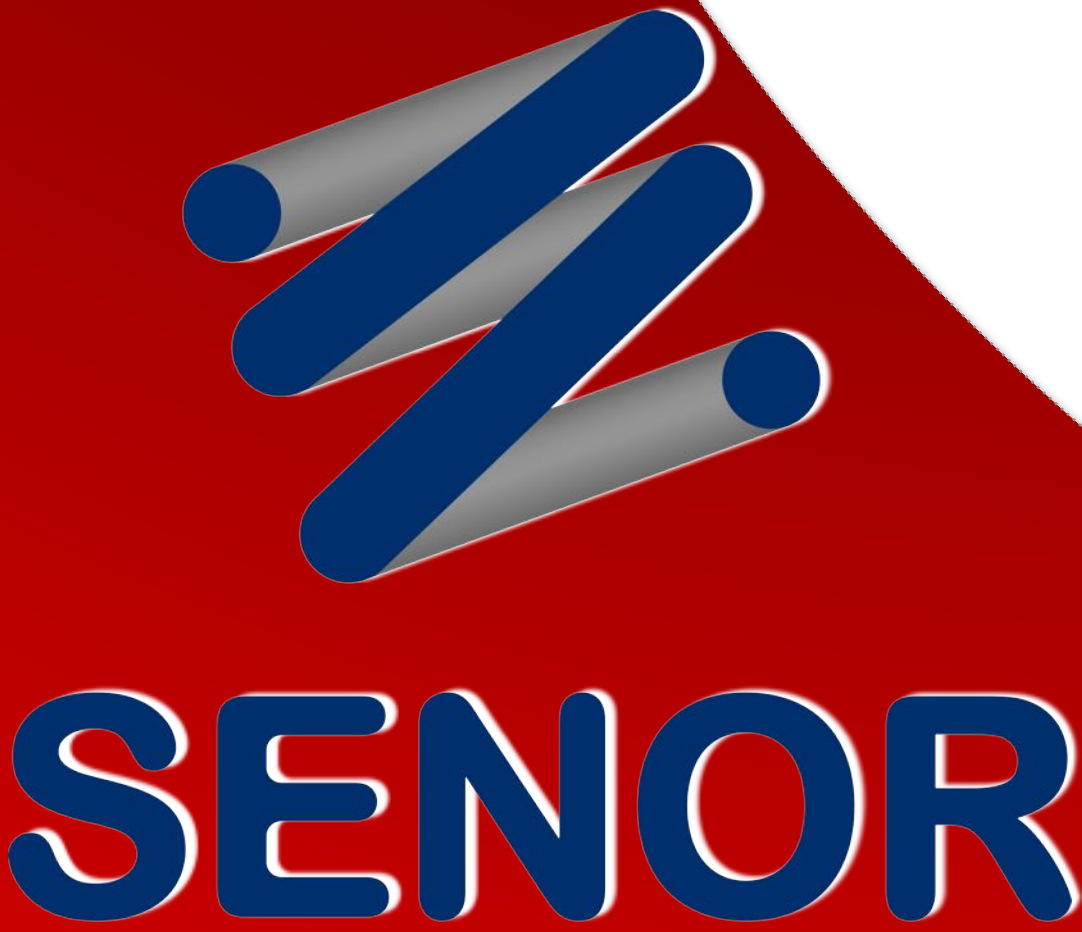
Graphic/Hybrid



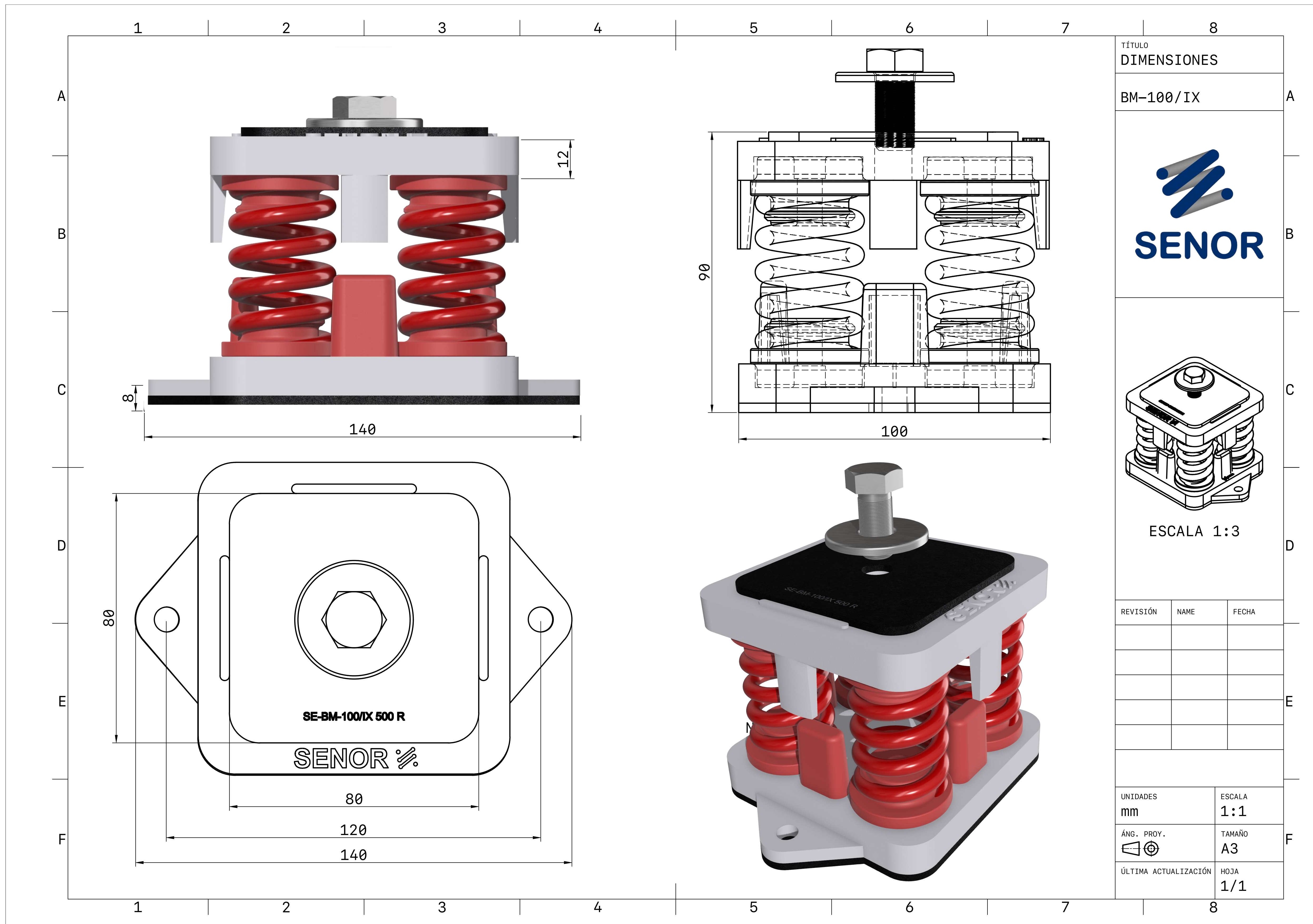
Maximum load

The own frequencies indicated are valid for maximum usage loads.

NOTE: level of acoustic insulation for a linear system with a single level of freedom (**pure vertical translation**) and a rigid support surface.



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•**SEÑOR Certifies.**

All our products in the **Industrial Range** for the support floor-mounted machines, specifically the **BM-100/IX** series, have an optimal service life of **10 years**. This applies provided they are installed under normal environmental conditions and are not exposed to chemicals that could damage the product.

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RELATED PRODUCTS



SE-BM-100/IX 500R

It is the simplest in the range.

It is a direct-support damper with a screw and washer fastening.

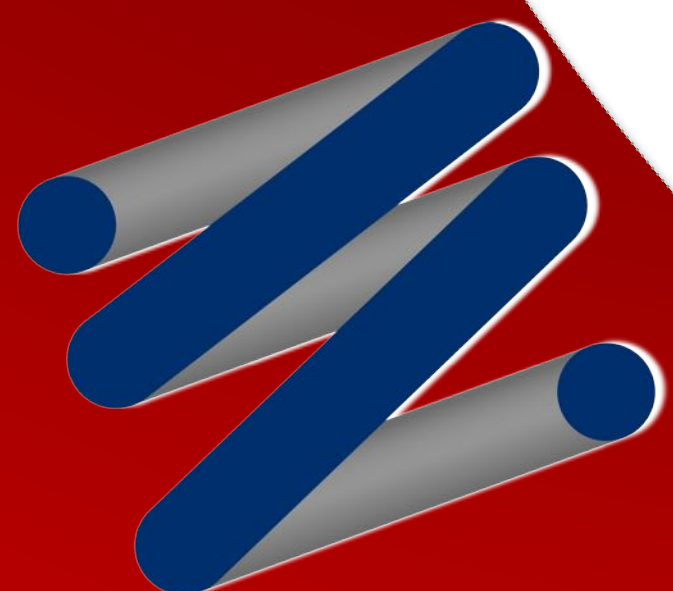
Available in different metric sizes.



SE-BM-100/IX ER 500

It is a damper that incorporates a stud, which allows for levelling thanks to the supplied nuts and washers.

Available in different metric sizes.



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SE-BM-100/IX RR 500

It is a damper which helps to support the equipment directly on top of it, with the advantage of being able to adjust its height to compensate for uneven surfaces.



SE-BM-100/IX RER 500

It is a damper which allows you to rest the equipment on its adjustable base to correct unevenness, and secure the equipment thanks to the incorporated rod.

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RELATED PRODUCTS



SE-BM-100/IX RR 500 + PT1

It allows the HVAC units to be supported without the need for screws. It comes equipped with a central locking system to secure the equipment and an adjustable base to correct unevenness.

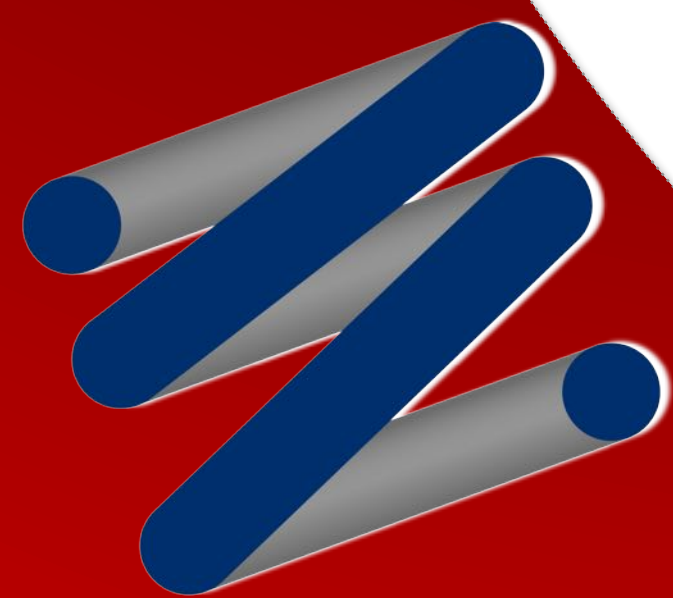


SE-BM-100/IX RR 500 + PT2

It allows the HVAC units to be supported without the need for screws. It incorporates a double locking system to secure the equipment (at its corners) and an adjustable base to correct unevenness.

For further information on this product range, please visit our website.

<https://senor.es/en/industry-range/industrial-machines-spring-dampers/bm-100-ix/>



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