

ISOTOP® MSN/Z und SD/Z Steel spring vibration isolators, tension elements

Design

ISOTOP® tension elements consist of a spring element, a rectangular tube housing and two connection nuts for threaded rods.

ISOTOP®-MSN/Z Connection thread M8

ISOTOP®-SD/Z onnection thread M10 (also available with damping core)

Field of application

ISOTOP® tension elements have a resonant frequency of about $3 \text{ Hz} \triangleq 180 \text{ min}^{-1}$ and are used for:

- Suspension elements from ceilings and steel constructions.
- Source isolation of ceiling-hung ventilators, fans, extractors, air conditioners, pipe lines, etc.
- Receiver isolation of sensitive electronic measuring equipment in refrigeration, air conditioning and ventilation as well as in pipe line and ceiling construction.
- Percussion isolation of all sorts of machines

Required data for selection

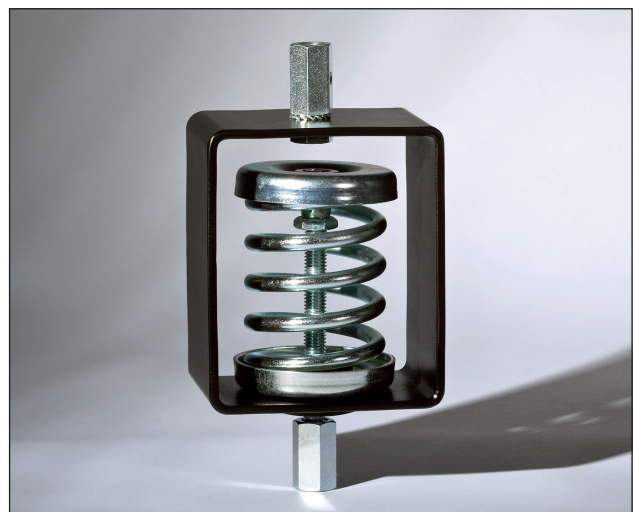
- Total weight to be absorbed
- Number and location of points of support
- Centre of gravity
- Structural shape of the device (dimensions)
- Direction of load
- Lowest parasitic frequency (rotational speed or number of strokes)

Advantages

- Element dimensions and connecting threads of the elements within the type series MSN/Z or SD/Z are uniform, which guarantees exchangeability.
- As a result of the open construction of the spring elements, the source is connected to the suspension point only via the spring. The spring element can oscillate in the horizontal plane without restriction.
- The spring is clearly visible, which allows checking of its condition without dismantling. The distance between spring coils is visible under load.



ISOTOP® MSN/Z, powder coated



ISOTOP® SD/Z, powder coated

Our service

Make use of our know-how on questions about vibration technology. We will gladly consult you and will calculate tailor-made solutions for vibration isolation.

ISOTOP® MSN/Z und SD/Z

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Selection table

Description	Ref. no.	Nominal range	Spring rate
ISOTOP® MSN/Z 1	450 002 71	18 N - 45 N	1,78 N/mm
ISOTOP® MSN/Z 2	450 002 72	27 N - 70 N	2,73 N/mm
ISOTOP® MSN/Z 3	450 002 73	45 N - 115 N	4,52 N/mm
ISOTOP® MSN/Z 4	450 002 74	70 N - 175 N	7,02 N/mm
ISOTOP® MSN/Z 5	450 002 75	115 N - 285 N	11,44 N/mm
ISOTOP® MSN/Z 6	450 002 76	175 N - 435 N	17,30 N/mm
ISOTOP® MSN/Z 7	450 002 77	285 N - 650 N	26,02 N/mm

Selection table

Description	Ref. no.	Nominal range	Spring rate
ISOTOP® SD/Z 1	450 002 11	120 N - 265 N	7,93 N/mm
ISOTOP® SD/Z 2	450 002 12	195 N - 380 N	12,90 N/mm
ISOTOP® SD/Z 3	450 002 13	300 N - 670 N	20,16 N/mm
ISOTOP® SD/Z 4	450 002 14	475 N - 1.200 N	31,64 N/mm
ISOTOP® SD/Z 5	450 002 15	720 N - 1.700 N	48,07 N/mm
ISOTOP® SD/Z 6	450 002 16	1.130 N - 2.700 N	75,65 N/mm
ISOTOP® SD/Z 7	450 002 17	1.815 N - 3.800 N	121,03 N/mm

Figure ISOTOP® MSN/Z

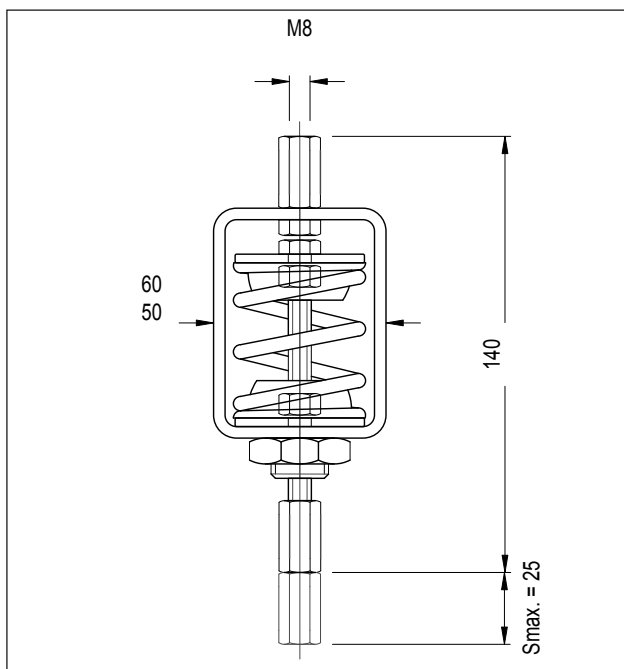
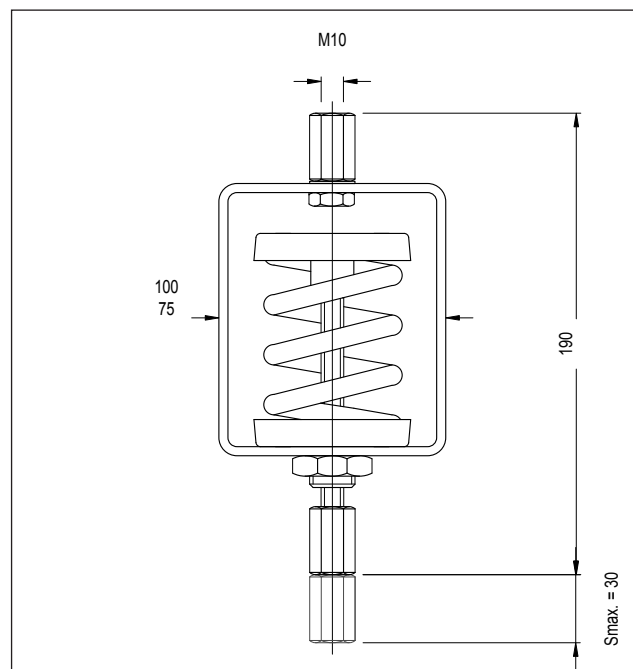


Figure ISOTOP® SD/Z



All data indicated are based upon our current knowledge. They may be used as calculation and standard values and are subject to the usual machining tolerances. Subject to change and correction.