

Walraven VibraTek® HS-1 Spring Hanger

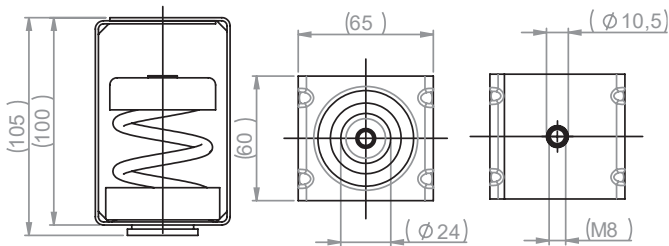
High performance spring isolator for light suspended loads



Features and Benefits

- Simple to install and does not need to be fixed to the base material
- Recommended for machinery with low working speeds above 700 rpm
- Rubber spring base cup prevents contact between housing and the spring
- Epoxy powder-coated housing, cap and spring provide increased resistance to corrosion
- Working temperature range -90 °C till 150 °C

Technical Drawing



Applications

- Pipelines, ducts, compressors, electrical panels, in-line fans and other HVAC equipment

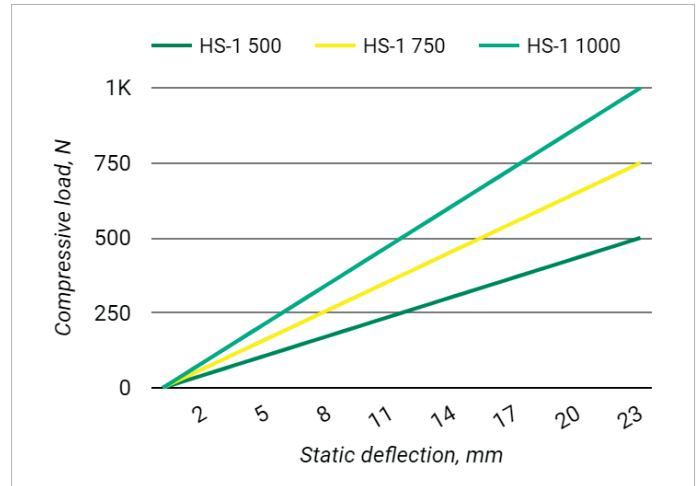
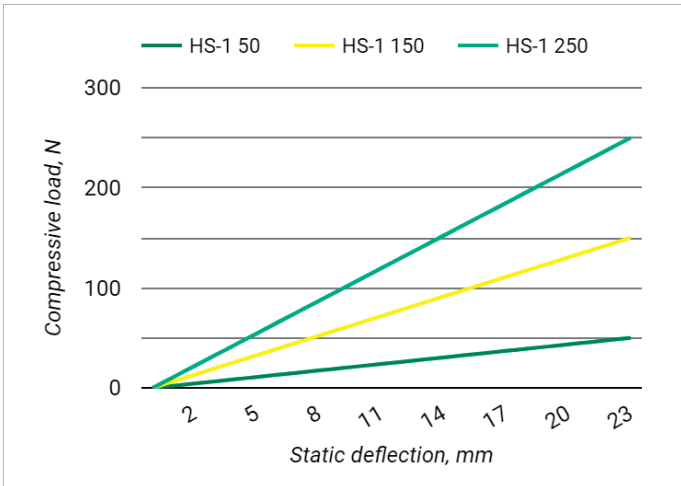
1. Product and packaging details

Part No.	Description	Dimension	Piece		Pack 1	
			(pcs)	EAN13	(pcs)	EAN13
2800600050	HS-1 Spring Hanger	50/M8	1	8719942045919	36	8719942045926
2800600150	HS-1 Spring Hanger	150/M8	1	8719942045940	36	8719942045957
2800600250	HS-1 Spring Hanger	250/M8	1	8719942045971	36	8719942045988
2800600500	HS-1 Spring Hanger	500/M8	1	8719942046008	36	8719942046015
2800600750	HS-1 Spring Hanger	750/M8	1	8719942046039	36	8719942046046
2800601000	HS-1 Spring Hanger	1000/M8	1	8719942046060	36	8719942046077

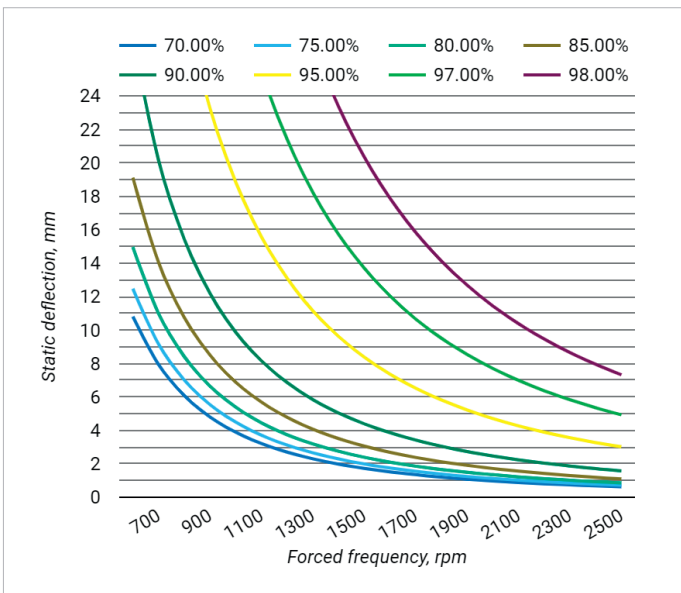
2. Performance data

Part No.	Description	Dimension	Max. deflection (mm)	Min. load (N)	Max. load (N)	Max. optimal load (N)	Max. optimal load (N)
2800600050	HS-1 Spring Hanger	50/M8	23	5	50	10	45
2800600150	HS-1 Spring Hanger	150/M8	23	20	150	30	140
2800600250	HS-1 Spring Hanger	250/M8	23	30	250	50	230
2800600500	HS-1 Spring Hanger	500/M8	23	50	500	100	450
2800600750	HS-1 Spring Hanger	750/M8	23	80	750	150	690
2800601000	HS-1 Spring Hanger	1000/M8	23	100	1000	200	920

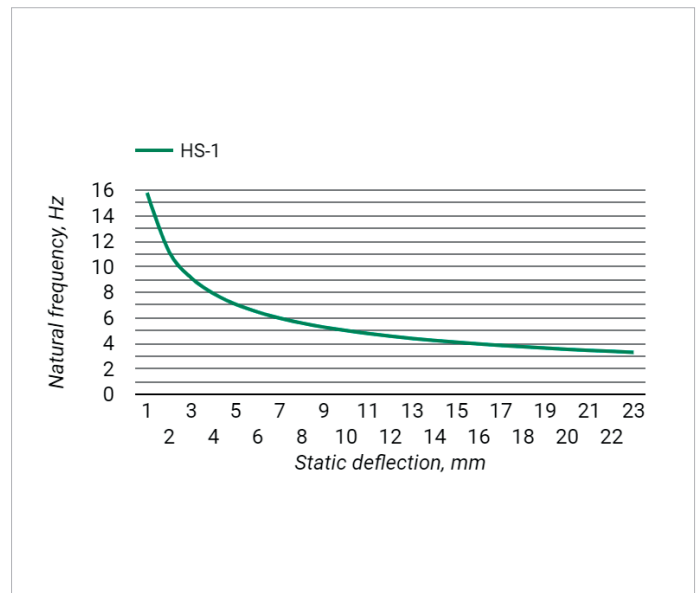
2.1 Static deflection



2.2 Isolation efficiency



2.2 Natural frequency



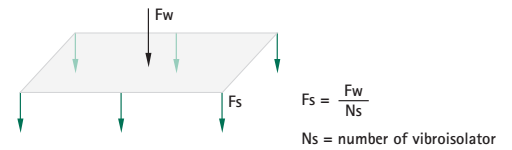
3. Dynamic properties

Description	Value
Damping factor	0.005
Average ratio $K_x / K_z = K_y / K_z$	≈ 1.0
Maximum transient overload % on maximum load	50 %
Working temperature range	-90 °C till 150 °C

4. Estimation of performance

Part No.	Applied load		Deflection (mm)	rpm Hz	Damping efficiency upon disturbing vibration (%)							
	(N)	(~kg)			500	800	1000	1200	1500	2000	2500	
					8.3	13.3	16.7	20.0	25.0	33.3	41.7	
2800600050	25	3	11.5		54.6	86.1	91.5	94.3	96.4	98.0	98.7	
	50	5	23.0		81.5	93.5	95.9	97.2	98.2	99.0	99.4	
2800600150	100	10	15.3		69.4	89.9	93.8	95.8	97.3	98.5	99.1	
	150	15	23.0		81.5	93.5	95.9	97.2	98.2	99.0	99.4	
2800600250	200	20	18.4		75.8	91.7	94.9	96.5	97.8	98.8	99.2	
	250	25	23.0		81.5	93.5	95.9	97.2	98.2	99.0	99.4	
2800600500	300	31	13.8		64.8	88.7	93.0	95.3	97.0	98.3	98.9	
	400	41	18.4		75.8	91.7	94.9	96.5	97.8	98.8	99.2	
	500	51	23.0		81.5	93.5	95.9	97.2	98.2	99.0	99.4	
2800600750	600	61	18.4		75.8	91.7	94.9	96.5	97.8	98.8	99.2	
	750	76	23.0		81.5	93.5	95.9	97.2	98.2	99.0	99.4	
2800601000	800	82	18.4		75.8	91.7	94.9	96.5	97.8	98.8	99.2	
	900	92	20.7		79.0	92.7	95.5	96.9	98.0	98.9	99.3	
	1000	102	23.0		81.5	93.5	95.9	97.2	98.2	99.0	99.4	

- 1 Select vibroisolator load capacity in the table - greater or equal to F_s
- 2 Horizontally to the left you can see the product number of Walraven VibraTek®
- 3 Horizontally to the right, you can read the deflection
- 4 Locate the column with a frequency lower than 2300 rpm
- 5 Read the damping performance at: cross deflection and frequency



V (%)	Description of damping efficiency
99	Excellent
93	Perfect
88	Very good
81	Good
67	Sufficient
20	Medium
0	No change
Resonance	Better without insulation

Description of damping efficiency	
Hospitals, hotels, facilities cultural (theaters, centers congress, auditorium)	Residential and office buildings, adjoining rooms to living spaces
	Normal requirements: cellars, facilities industrial, shopping centers
Low attenuation or negative impact - contact with the Technical Sales Support Department, to get an alternative solution	

Find out how we can support you

Would you like to find out more about any of the solutions described in this Technical Data Sheet?
Or would you like to discuss how we could help you find the best possible solution for your project?
Get in touch today!

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Technical Data Sheet Walraven Vibratex® HS-1 Spring Hanger (EN) – 05/2024 – PDF – Full content subject to modifications
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