

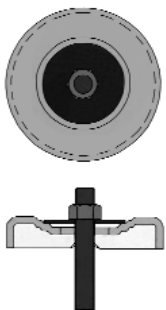
KINETICS™

1" and 2" Deflection Isolation Hangers Model SFH

- **Patented Self Centering Cap**
- **Epoxy Powder Coated Bracket and Spring Coil**

Description

Kinetics Model SFH Vibration Isolation Hangers consist of free-standing, large diameter, laterally stable steel springs in series with a precompressed molded fiberglass insert assembled into a stamped or welded hanger bracket. To assure stability, the spring element has a minimum lateral spring stiffness of 1.0 times the rated vertical stiffness. Hangers will allow support rod misalignment through a 30° arc without short circuiting. Isolation brackets will carry a 500% overload without failure. Model SFH hangers are superior to hangers which incorporate a spring only, that can transmit noise through the all-metal construction, and hangers incorporating noise stop pads only, that can transmit low frequency vibration which a spring would isolate. Hangers are available in deflections 1.04" to 2.20" (26 to 56 mm), and in capacities from 35 to 3500 lbs. (16 to 1588 kg). Kinetics Model SFH combination hangers are recommended for the isolation of vibration produced by suspended mechanical equipment, low speed suspended fans, transformers, ductwork, piping, etc.



**How the self centering
no short cap works:**

**Indexed steps in spring cap
correspond to standard
washer diameters for the
appropriate rod diameter. The
washer and rod stay centered
in the cap.**



Application

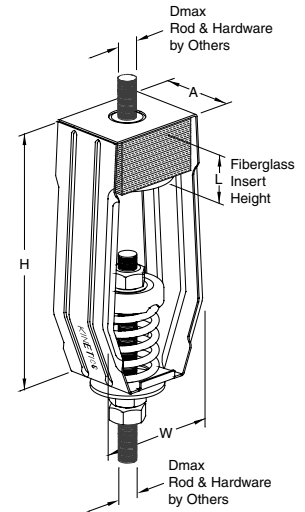
Kinetics Model SFH hangers are recommended for use near critically quiet areas for isolating any suspended source of both audible and inaudible noise and vibration. Suspended mechanical equipment such as in-line fans, cabinets fans, and piping and ductwork in close proximity to mechanical equipment are typical uses of Model SFH hangers.

High sound transmission loss ceiling systems can be effectively isolated by the use of Model SFH hangers in the ceiling suspension system. This hanger model is particularly suitable for use in isolated ceiling systems used to shield spaces from mechanical equipment rooms, flyover aircraft, and similar sound isolation involving predominantly low frequency noise.

Standard Model SFH hangers are shipped fully assembled and ready for installation in threaded rod suspension systems.

Model SFH hangers are available in a wide range of load and static deflection selections and can be provided with labor saving accessories for adaption to wire or strap suspension systems, and may be preloaded, or provided with plates for ease in erecting piping at a fixed elevation.

Hanger Type	Spring Color	Rated Load		Spring O.D.		L		H		W		A		Dmax	
		lbs.	kg	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
SFH-1-35	Blue	35	16	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-70	Green	70	32	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-125	Gray	125	57	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-245	Brown	245	111	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-370	Orange	370	168	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-500	Beige	500	227	1.75	44	1.25	32	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-600	Chrome	600	273	1.75	44	1.25	32	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-700	Beige/White	700	318	1.75	44	1.25	32	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-805	Chrome/Wht	805	366	1.75	44	1.25	32	7.38	187	3.69	94	2.25	57	0.50	13
SFH-1-250	Blue	250	114	3.00	76	1.50	38	8.59	218	5.58	142	3.63	92	1.00	25
SFH-1-450	Green	450	205	3.00	76	1.50	38	8.59	218	5.58	142	3.63	92	1.00	25
SFH-1-625	Black	625	284	3.00	76	1.50	38	8.59	218	5.58	142	3.63	92	1.00	25
SFH-1-800	Gray	800	364	3.00	76	1.50	38	8.59	218	5.58	142	3.63	92	1.00	25
SFH-1-1000	Red	1000	455	3.00	76	1.50	38	8.59	218	5.58	142	3.63	92	1.00	25
SFH-1-1250	Brown	1250	568	3.00	76	1.50	38	8.59	218	5.58	142	3.63	92	1.00	25
SFH-1-1700	Orange	1700	773	3.00	76	1.50	38	8.59	218	5.58	142	3.63	92	1.00	25
SFH-1-2200	Org/Gray	2200	998	3.00	76	2.00	51	9.50	241	5.00	127	4.75	121	1.00	25
SFH-1-2465	Blue	2465	1118	3.00	76	2.00	51	9.50	241	5.00	127	4.75	121	1.00	25
SFH-1-2865	Blue/Gray	2865	1300	3.00	76	2.00	51	9.50	241	5.00	127	4.75	121	1.00	25
SFH-1-3500	Blu/Brn	3500	1588	3.00	76	2.00	51	9.50	241	5.00	127	4.75	121	1.00	25
SFH-2-35	Blue	35	16	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-2-70	Green	70	32	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-2-120	Gray	120	55	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-2-220	Brown	220	100	1.75	44	1.13	29	7.38	187	3.69	94	2.25	57	0.50	13
SFH-2-260	Blue	260	118	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	1.00	25
SFH-2-465	Green	465	211	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	1.00	25
SFH-2-720	Black	720	328	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	1.00	25
SFH-2-850	White	850	386	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	1.00	25
SFH-2-1025	Beige	1025	466	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	1.00	25
SFH-2-1200	Chrome	1200	546	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	1.00	25
SFH-2-2000	Orange	2000	905	5.00	127	1.25	32	12.00	305	6.00	152	6.00	152	1.00	25
SFH-2-2500	Blue	2500	1135	5.00	127	1.25	32	12.00	305	6.00	152	6.00	152	1.00	25
SFH-2-2750	Blue/Blue	2750	1245	5.00	127	1.25	32	12.00	305	6.00	152	6.00	152	1.00	25
SFH-2-3025	Blu/Grn	3025	1375	5.00	127	1.25	32	12.00	305	6.00	152	6.00	152	1.00	25
SFH-2-3250	Blu/Blk	3250	1475	5.00	127	1.25	32	12.00	305	6.00	152	6.00	152	1.00	25



Specifications

Vibration isolators for suspended equipment with minimum static deflection requirement exceeding .4" (10 mm), and where both high and low frequency vibration is to be isolated, shall be hangers consisting of a laterally stable steel spring in series with a pre-compressed molded fiberglass insert, complete with a load plate and assembled in a stamped or welded steel bracket.

The fiberglass insert shall be individually coated with a flexible, moisture-impervious elastomeric membrane. The insert shall be molded from glass fibers with fiber diameters not exceeding .00027" (6.8 microns) and with a modulus of elasticity of 10.5 million PSI (738,223 kg/cm²).

Natural frequency of fiberglass vibration isolators shall be essentially constant for the operating load range of the supported equipment.

The spring element shall have a minimum lateral stiffness of 1.0 times the rated vertical stiffness.

Vibration isolators shall be color coded or otherwise identified to indicate load capacity.

The hanger bracket shall be designed to carry a 500% overload without failure and to allow support rod misalignment through a 30° arc without metal-to-metal contact or other short circuit.

The hanger bracket shall incorporate spring caps with indexed steps which correspond to the washer diameter of appropriately sized hanger rod to keep the rod centered in the spring cap and reduce rod misalignment. The spring caps are protected under U.S. patent number 5,653,426.

Isolation hangers shall be selected by the manufacturer for each specific application to comply with deflection requirements as shown on the Vibration Isolation Schedule or as indicated on the project documents.

The combination isolation hanger assembly with fiber glass insert shall be Model SFH, as manufactured by Kinetics Noise Control, Inc.



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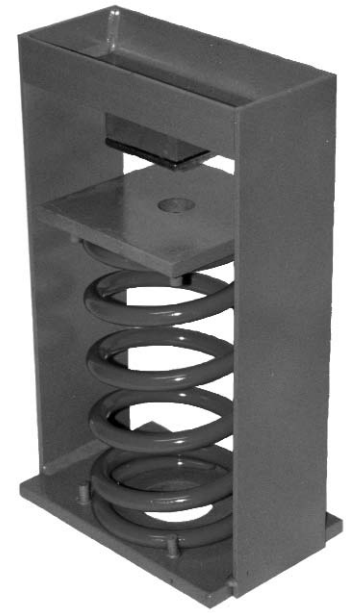
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Kinetics Noise Control, Inc. is continually upgrading the quality of our products. We reserve the right to make changes to this and all products without notice.

KINETICS™

4" Deflection Isolation Hangers Model SFH



Application

Kinetics Model SFH hangers are recommended for use near critically quiet areas for isolating any suspended source of both audible and inaudible noise and vibration. Suspended mechanical equipment such as in-line fans, cabinet fans, and piping and ductwork in close proximity to mechanical equipment are typical uses of Model SFH hangers.

Kinetics' minimum recommendation for the placement of spring hangers is that they be installed on all piping in the equipment room and on the first 50' (15 m) for piping that extends outside of the equipment room. For typical installations, the three spring hangers closest to the equipment should have equal deflection to the equipment isolators. The remaining spring hangers should have a minimum deflection of 1" (25 mm). In noise sensitive areas, the pipe hangers selected should have the same deflection as that specified for the equipment isolation and all piping in the building should be isolated.

Standard Model SFH hangers are shipped fully assembled and ready for installation in threaded rod suspension systems.

Model SFH hangers are available in a wide range of loads and static deflections. SFPH models are available in the same capacities and may be pre-loaded for ease in erecting piping at a fixed elevation.

Description

Kinetics Model SFH Vibration Isolation Hangers consist of free-standing, large diameter, laterally stable steel springs in series with a precompressed molded fiberglass insert assembled into a stamped or welded hanger bracket. Hangers incorporate a high deflection, color-coded spring element and a fiberglass isolator complete with load plate. To assure stability, the spring element has a minimum lateral spring stiffness of 1.0 times the rated vertical stiffness. Springs are epoxy powder coated, with a 1000 hour salt spray rating per ASTM B-117. Hangers will allow support rod misalignment through a 30° arc without short circuiting. Isolation brackets will carry a 500% overload without failure. Model SFH hangers are superior to hangers which incorporate a spring only, which can transmit noise through the all-metal construction, and hangers incorporating noise stop pads only, that can transmit low frequency vibration. Hangers are available in deflections 4.05" to 4.75" (104 to 112 mm) and in capacities from 100 to 3850 lbs. (46 to 1747 kg). Kinetics Model SFH combination hangers are recommended for the isolation of vibration produced by suspended mechanical equipment, low speed suspended fans, transformers, ductwork, piping, etc.

Hanger Type	Spring Color	Rated Capacity		Spring O.D.		L		H		W		A		B		Dmax	
		lbs.	kg	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
SFH-4-100	GRAY	100	45	5.63	143	2.66	68	16.00	406	9.38	238	4.00	102	6.00	152	1.13	29
SFH-4-250	BLUE	250	114	5.63	143	2.66	68	16.00	406	9.38	238	4.00	102	6.00	152	1.13	29
SFH-4-500	GREEN	500	227	5.63	143	2.66	68	16.00	406	9.38	238	4.00	102	6.00	152	1.13	29
SFH-4-700	BLACK	750	341	5.63	143	2.66	68	16.00	406	9.38	238	4.00	102	6.00	152	1.13	29
SFH-4-1000	RED	1000	454	5.63	143	2.66	68	16.00	406	9.38	238	4.00	102	6.00	152	1.13	29
SFH-4-1250	BROWN	1250	568	5.63	143	2.66	68	16.00	406	9.38	238	4.00	102	6.00	152	1.13	29
SFH-4-1600	ORANGE	1600	726	5.63	143	2.66	68	16.00	406	9.38	238	4.00	102	6.00	152	1.13	29
SFH-4-2200	BEIGE	2250	1023	8.00	203	3.17	81	18.50	470	13.50	343	6.00	152	8.00	203	1.13	29
SFH-4-2500	BGE/BLU	2500	1135	8.00	203	3.17	81	18.50	470	13.50	343	6.00	152	8.00	203	1.13	29
SFH-4-2750	BGE/GRN	2750	1249	8.00	203	3.17	81	18.50	470	13.50	343	6.00	152	8.00	203	1.13	29
SFH-4-3000	BGE/BLK	3000	1362	8.00	203	3.17	81	18.50	470	13.50	343	6.00	152	8.00	203	1.13	29
SFH-4-3250	BGE/RED	3250	1476	8.00	203	3.17	81	18.50	470	13.50	343	6.00	152	8.00	203	1.13	29
SFH-4-3500	BGE/BRN	3500	1589	8.00	203	3.17	81	18.50	470	13.50	343	6.00	152	8.00	203	1.13	29
SFH-4-3850	BGE/ORG	3850	1748	8.00	203	3.17	81	18.50	470	13.50	343	6.00	152	8.00	203	1.13	29

Specifications

Vibration isolators for suspended equipment with minimum static deflection requirement exceeding 0.4" (10 mm), and where both high and low frequency vibration is to be isolated, shall be hangers consisting of a laterally stable steel spring in series with a precompressed molded fiberglass insert complete with load plate and assembled in a stamped or welded steel bracket.

The bracket shall be finished with an epoxy-based powder coating. The manufacturer shall provide independent laboratory testing showing that the bracket with this finish has endured a minimum of 1,000 hours of exposure to salt spray fog testing per ASTM B117 without signs of corrosion.

The fiberglass insert shall be individually coated with a flexible, moisture-impervious elastomeric membrane. The insert shall be molded from glass fibers with fiber diameters not exceeding 0.00027" (6.8 microns) and with a modulus of elasticity of 10.5 million PSI (738,223 kg/sq. cm).

Natural frequency of fiberglass vibration isolators shall be essentially constant for the operating load range of the supported equipment.

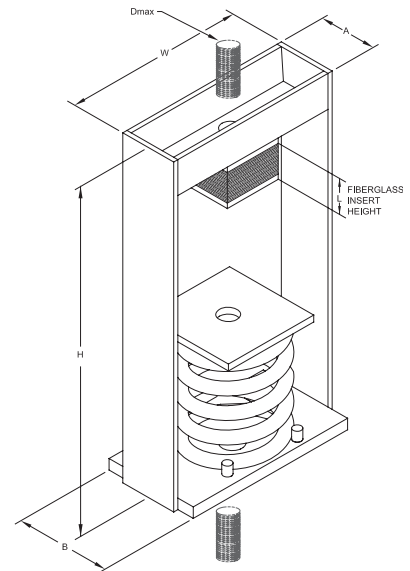
The spring element shall have a minimum lateral stiffness of 1.0 times the rated vertical stiffness.

Vibration isolators shall be color coded or otherwise identified to indicate load capacity.

The hanger bracket shall be designed to carry a 500% overload without failure and to allow support rod misalignment through a 30° arc without metal-to-metal contact or other short circuit.

Isolation hangers shall be selected by the manufacturer for each specific application to comply with deflection requirements as shown on the Vibration Isolation Schedule or as indicated on the project documents.

The combination isolation hanger assembly with fiberglass insert shall be Model SFH, as manufactured by Kinetics Noise Control, Inc.



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Kinetics Noise Control, Inc. is continually upgrading the quality of our products. We reserve the right to make changes to this and all products without notice.