

Datasheet

1" and 2" Deflection Isolation Hangers Model SRH

Application

Model SRH hangers are used to isolate suspended sources of both 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 SRH hangers featuring the patented No-Short self-centering cap.

Alara-Lukagro's 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.

High sound transmission loss ceiling systems can be isolated by the use of Model SRH hangers in the ceiling suspension system. Standard Model SRH hangers are shipped fully assembled and ready for installation in threaded metal rod suspension systems. Model SRH 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 positioning plates for ease in erecting piping at a fixed elevation.

Description

Model SRH vibration isolation hangers consist of free-standing, large diameter, laterally stable steel springs in series with an elastomer-in-shear 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 with properly deflected coils will allow a support

rod misalignment through a 30° arc without short circuiting. Isolation brackets will carry a 500% overload without failure. Hangers are available in deflections from 1.20" to 2.40" (30 to 61 mm), and in capacities from 35 to 3500 lbs. (16 to 1588 kg). Model SRH hangers are superior to hangers which incorporate only springs, which can transmit noise through the all metal construction, and hangers which incorporate only pads, which can transmit low frequency vibration. Model SRH hangers are recommended for the isolation of vibration produced by suspended mechanical equipment, low-speed suspended fans, transformers ductwork, piping, etc.

Specifications

Vibration isolators for suspended equipment with minimum static deflection requirement exceeding 0.4" (10 mm), and where both high and low frequency vibrations are to be isolated, shall be hangers consisting of a laterally stable spring in series with an elastomer-in-shear insert complete with load transfer plates 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 elastomer insert shall be molded from oil-resistant compounds and shall be color coded to indicate load capacity and selected to operate within its published load range. The spring element shall have a minimum lateral stiffness of 1.0 times the rated vertical stiffness. Springs shall be color coded or otherwise identified to indicate load capacity.

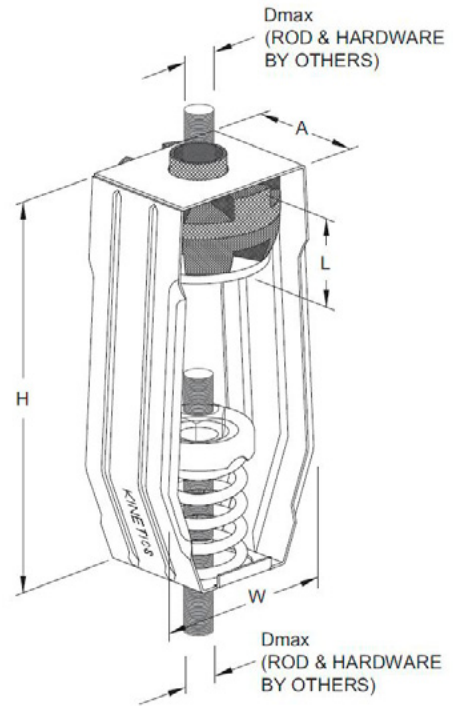
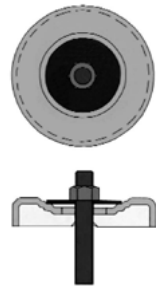
The hanger bracket shall be designed to carry a 500% overload without failure and to allow a support rod misalignment through a

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 the appropriately sized hanger rod to keep the rod centered in the spring cap and reduce rod misalignment.

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 neoprene insert shall be Model SRH.

Self-Centering No-Short Cap

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. Patent No. 5,653,426



Isolator Type	Spring Color	Rated Capacity		Rated Deflection		Spring O.D.		L		H		W		A		Dmax	
		Lbs	kg	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
SRH-1-35	Blue	35	16	1.61	41	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-70	Green	70	32	1.55	39	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-125	Gray	125	57	1.56	40	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-245	Brown	245	111	1.52	39	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-370	Orange	370	168	1.29	33	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-500	Beige	500	227	1.45	37	1.75	45	1.89	48	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-600	Chrome	600	273	1.35	34	1.75	45	1.89	48	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-700	Beige/Wh	700	318	1.40	36	1.75	45	1.89	48	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-805	Chr/Wh	805	365	1.25	32	1.75	45	1.89	48	7.38	187	3.69	94	2.25	57	0.63	16
SRH-1-250	Blue	250	113	2.12	54	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	0.88	22
SRH-1-450	Green	450	204	1.94	49	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	0.88	22
SRH-1-625	Black	625	283	1.80	46	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	0.88	22
SRH-1-800	Gray	800	363	1.55	39	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	0.88	22
SRH-1-1000	Red	1000	454	1.45	37	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	0.88	22
SRH-1-1250	Brown	1250	567	1.38	35	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	0.88	22
SRH-1-1700	Orange	1700	771	1.35	34	3.00	76	2.00	51	8.59	218	5.58	142	3.63	92	0.88	22
SRH-1-2200	Org/Gray	2200	998	1.52	39	3.00	76	1.85	47	9.50	241	5.00	127	4.75	121	0.88	22
SRH-1-2465	Blue	2465	1118	1.58	40	3.00	76	1.85	47	9.50	241	5.00	127	4.75	121	0.88	22
SRH-1-2865	Blu/Gray	2865	1300	1.69	43	3.00	76	1.85	47	9.50	241	5.00	127	4.75	121	0.88	22
SRH-1-3500	Blu/Brn	3500	1588	1.82	46	3.00	76	1.85	47	9.50	241	5.00	127	4.75	121	0.88	22
SRH-2-35	Blue	35	16	2.09	53	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.50	13
SRH-2-70	Green	70	32	2.19	56	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.50	13
SRH-2-120	Gray	120	54	2.32	59	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.50	13
SRH-2-220	Brown	220	100	2.29	58	1.75	45	1.72	44	7.38	187	3.69	94	2.25	57	0.50	13
SRH-2-260	Blue	260	118	2.21	56	3.00	76	1.75	44	8.59	218	5.58	142	3.63	92	0.88	22
SRH-2-465	Green	465	211	2.01	51	3.00	76	1.75	44	8.59	218	5.58	142	3.63	92	0.88	22
SRH-2-720	Black	720	327	2.07	53	3.00	76	1.75	44	8.59	218	5.58	142	3.63	92	0.88	22
SRH-2-850	White	850	386	1.97	50	3.00	76	1.75	44	8.59	218	5.58	142	3.63	92	0.88	22
SRH-2-1025	Beige	1025	465	1.99	51	3.00	76	1.75	44	8.59	218	5.58	142	3.63	92	0.88	22
SRH-2-1200	Chrome	1200	544	2.00	51	3.00	76	1.75	44	8.59	218	5.58	142	3.63	92	0.88	22
SRH-2-2000	Orange	2000	907	2.08	53	5.00	127	1.75	44	12.00	305	6.00	152	6.00	152	1.00	25
SRH-2-2500	Blue	2500	1134	2.10	53	5.00	127	1.75	44	12.00	305	6.00	152	6.00	152	1.00	25
SRH-2-2750	Blu/Blu	2750	1247	2.12	54	5.00	127	1.75	44	12.00	305	6.00	152	6.00	152	1.00	25
SRH-2-3025	Blu/Grn	3025	1372	2.14	54	5.00	127	1.75	44	12.00	305	6.00	152	6.00	152	1.00	25
SRH-2-3250	Blu/Blk	3250	1474	2.14	54	5.00	127	1.75	44	12.00	305	6.00	152	6.00	152	1.00	25