

天花弹簧吊码 SHP-1
Spring Hanger SHP-1
25mm Deflection Type

Introduction

NOISESTOP SHP-1 Spring Hangers are designed to isolate suspended sources of both noise and vibration by using high resilient neoprene pads and springs to avoid metal to metal contact. Common Spring Hanger Ceiling system incorporates suspension ceiling studs and gypsum board. Higher sound transmission loss systems can be isolated by the use of steel acoustics panel (e.g. **NOISESTOP** PAC40 & PAC30) or direct attached to piping, suspended fans, suspended mechanical equipment, ductwork, etc.

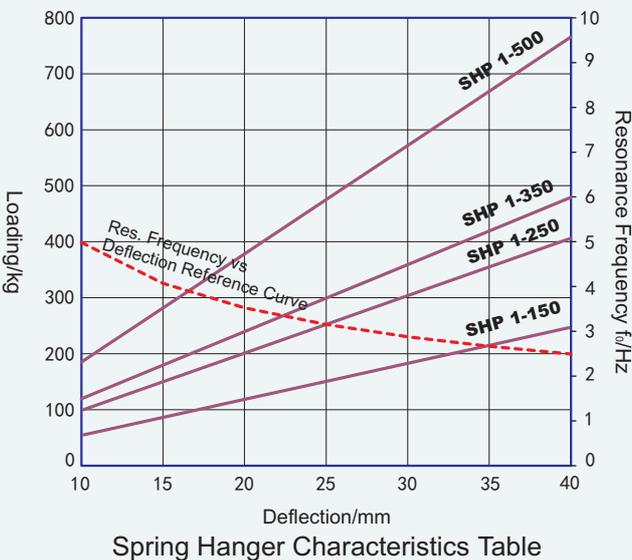
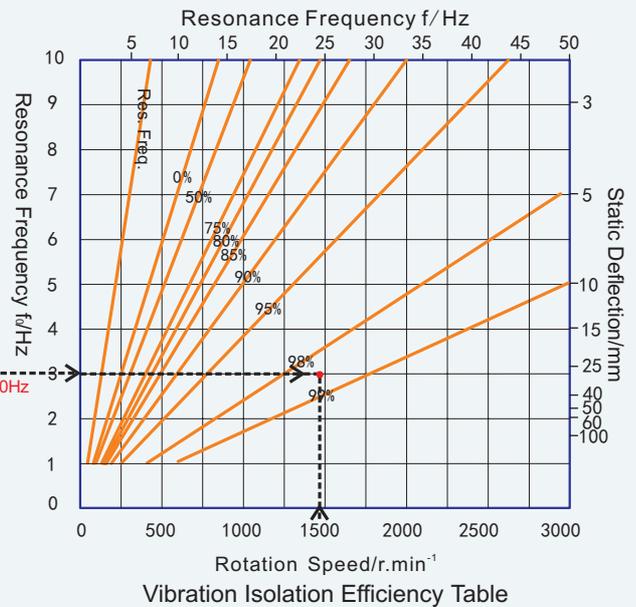
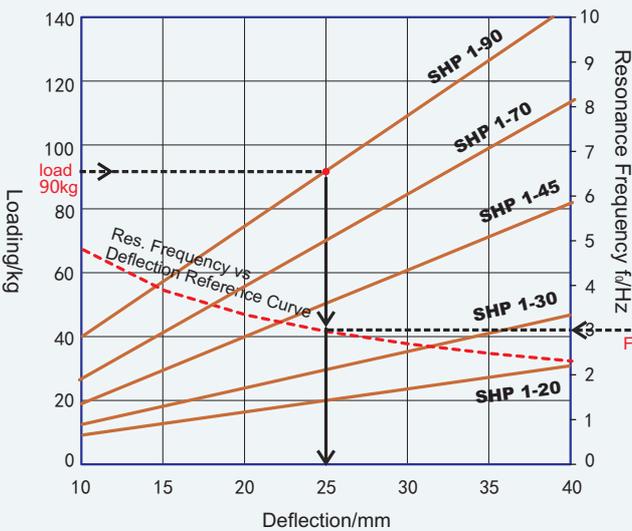
Features

With proper hole size at the bottom of hanger box, hanger load can move 30 degree at any direction. A combination of 5mm neoprene cap and 15mm neoprene pad improve performance against low frequency vibration and noise transmission. The loading to deflection ratio is about 1.2 to 1.4 to stabilize the system. Design load is 80% of the rated load to minimize significant impact to hanger performance and longer product life cycle. Spring Hangers can carry at least 150% overload without failure.



SHP-1 series

Spring Hangers



Model Selection (Example)

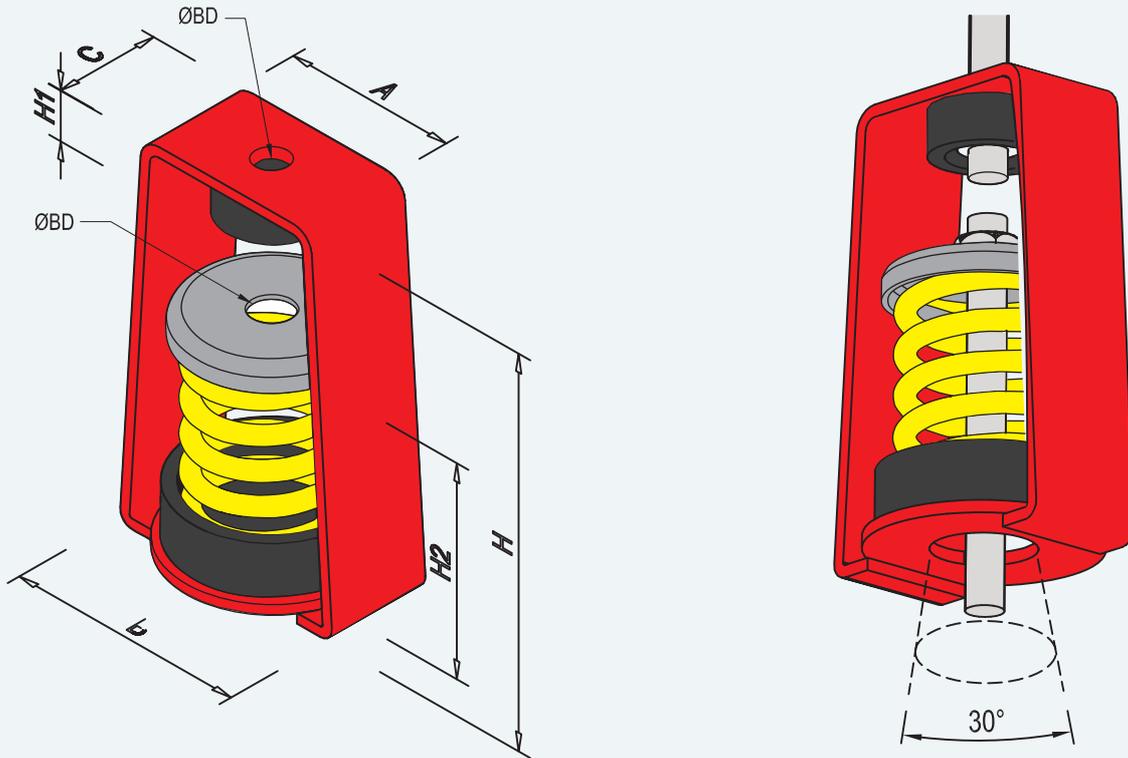
Assume total operating weight of fan machine is approximate 360kg, the rotation speed is 1440rpm, and 4 supporting points of fan machine.

Based on the above information, the model is selected following below steps:

1. Calculate the loading of each supporting point $360 \div 4 = 90\text{kg}$.
2. Choosing Model **SH 1-90**, from "Spring Hanger Characteristics Table", the deflection is 25mm and resonance frequency is 3.0Hz under 90kg loading.
3. From "Vibration Isolation Efficiency Table", the vibration efficiency is 98%-99%.

Specification

The NOISESTOP Spring Hanger is produced by stamping process and assembled with neoprene pads to optimize the isolation efficiency. The high quality case is treated by powder coated which passed the anti-corrosion salt spray test.



Type of Case	A	B	C	H1	H2	H	ΦBD	Loading Range (kg)
SH-B	40	60	28	7	65	110	10	20-30
SH-C	70	90	40	25	90	150	12-14	50-300
SH-D	86	120	50	20	130	200	12-16	320-500

Hanger Model	Design loading		Loading Range		Static Stiffness (kg/mm)	Spring Color	Direction of coil	Type of Case	Rod Size
	Load (kg)	Def. (mm)	Load (kg)	Def. (mm)					
SHP 1-20	20	25	10-20	12-25	0.8	Code 1	left	B	10
SHP 1-30	30	25	20-30	17-25	1.8	Code 2	left	B	10
SHP 1-45	50	25	30-50	15-25	2	Code 3	left	C	12-14
SHP 1-70	70	25	50-80	17-27	3	Code 4	left	C	12-14
SHP 1-90	90	25	80-100	22-27	3.6	Code 5	left	C	12-14
SHP 1-150	150	25	130-150	21-25	6	Code 6	left	C	12-14
SHP 1-250	250	25	200-280	22-28	10	Code 7	left	C	12-14
SHP 1-350	300	25	320-360	26-30	12.1	Code 8	left	D	12-16
SHP 1-500	480	25	470-530	25-28	19.2	Code 9	left	D	12-16