

## PTH-S • SPRING VIBRATION ISOLATING HANGER

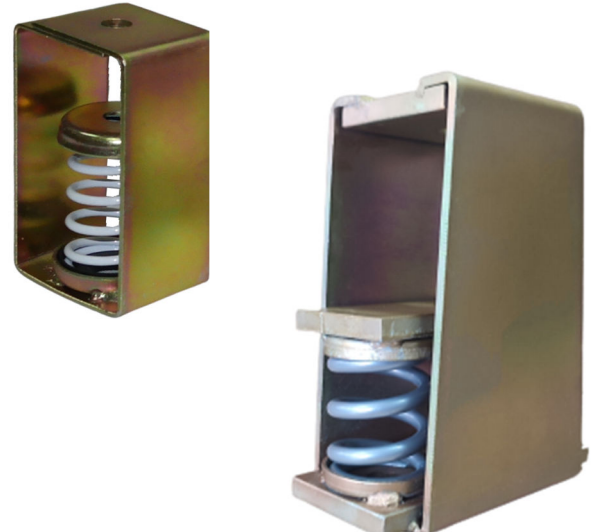
## PTH-SG • SPRING AND RUBBER VIBRATION ISOLATING HANGER

### DESCRIPTION:

TOZEN PTH-S series vibration isolating hangers consist of a rectangular steel box incorporated with a free standing, laterally stable steel spring with load transfer steel cup with rubber washer. PTH-SG comes in series with a noise absorbing hanger rubber for better performance. This combination takes advantage of the best properties of both materials. Both design permits installation in the hanger rods or at the ceiling.

### APPLICATION:

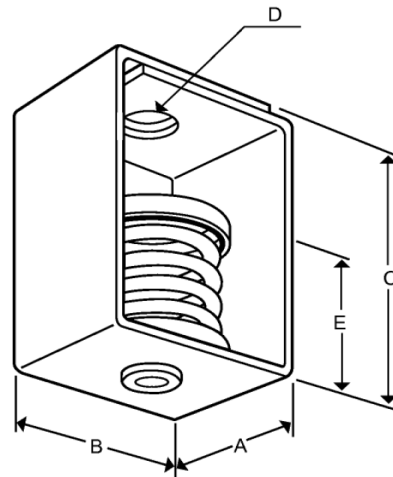
TOZEN PTH-S & PTH-SG hangers are used to isolate suspended sources of both audible and inaudible noise and vibration. Suspended mechanical equipment such as in-line fans, cabinet fans, and piping and ductwork in close proximity to mechanical equipment, are typical uses of Tozen PTH-S & PTH-SG hangers. Standard PTH-S & PTH-SG hangers are shipped fully assembled and ready for installation in threaded metal rod suspension systems. TOZEN PTH-S & PTH-SG hangers can be provided with labour saving accessories for adaption to wire or strap suspensions systems. Both models may be factory preloaded or provided with positioning plate for ease in erecting piping at a fixed elevation. Higher load capacities, larger deflections and 30 degree ARC capacity are available.



**PTH-S series**



**PTH-SG series**



Model: PTH-S

## PTH-S TYPE

### 25mm DEFLECTION SPRING VIBRATION ISOLATING HANGER

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Colour Code	(A)	(B)	(C)	(D)	(E)	Maximum Rod Dia. (MRD)
	(Kgs)	(Lbs)								
PTH-S-10	10	22	0.4	GREEN						
PTH-S-15	15	33	0.6	BLUE						
PTH-S-25	25	55	1.0	WHITE						
PTH-S-35	35	77	1.4	YELLOW						
PTH-S-50	50	110	2.0	ORANGE	60	85	140	15	92	14
PTH-S-80	80	176	3.2	VIOLET						
PTH-S-120	120	264	4.8	RED						
PTH-S-175E	175	385	7.0	SILVER						
PTH-S-225E	225	495	9.0	BROWN						
PTH-S-150	150	330	6.0	ORANGE						
PTH-S-200	200	440	8.0	VIOLET	85	115	180	18	115	16
PTH-S-300	300	660	12.0	RED						
PTH-S-450	450	990	18.0	GREEN						
PTH-S-600E	600	1320	24.0	SILVER						
PTH-S-825E	825	1815	33.0	BROWN	85	115	180	24	120	22
PTH-S-1100E	1100	2420	44.0	BLUE						
PTH-S-1202E	1200	2640	48.0	SILVER						
PTH-S-1502E	1500	3300	60.0	GREEN+BROWN						
PTH-S-1652E	1650	3630	66.0	BROWN						
PTH-S-1802E	1800	3960	72.0	SILVER+BROWN						
PTH-S-1952E	1950	4290	78.0	BROWN+WHITE	230	124	290	30	145	27
PTH-S-2202E	2200	4840	88.0	BLUE						
PTH-S-2252E	2250	4950	90.0	BROWN+BROWN						
PTH-S-2502E	2500	5500	100.0	BLUE+WHITE						
PTH-S-2802E	2800	6160	112.0	BLUE+BROWN						
PTH-S-3004E	3000	6600	120.0	GREEN+BROWN						
PTH-S-3304E	3300	7260	132.0	BROWN						
PTH-S-3604E	3600	7920	144.0	SILVER+BROWN						
PTH-S-3904E	3900	8580	156.0	BROWN+WHITE						
PTH-S-4404E	4400	9680	176.0	BLUE	195	235	300	36	148	33
PTH-S-4504E	4500	9900	180.0	BROWN+BROWN						
PTH-S-5004E	5000	11000	200.0	BLUE+WHITE						
PTH-S-5604E	5600	12320	224.0	BLUE+BROWN						

We reserve the right to change without notice for error rectification or design modification.

## PTH-S2 TYPE

### 50mm DEFLECTION SPRING VIBRATION ISOLATING HANGER

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Colour Code	(A)	(B)	(C)	(D)	(E)	Maximum Rod Dia. (MRD)
	(Kgs)	(Lbs)								
PTH-S2-25	25	55	0.5	WHITE						
PTH-S2-35	35	77	0.7	YELLOW						
PTH-S2-50	50	110	1.0	ORANGE						
PTH-S2-80E	80	176	1.6	VIOLET	85	115	180	18	133	16
PTH-S2-125E	125	275	2.5	RED						
PTH-S2-175E (S)	175	385	3.5	SILVER						
PTH-S2-250E	250	550	5.0	BROWN						
PTH-S2-175E (M)	175	385	3.5	ORANGE						
PTH-S2-245E	245	539	4.9	VIOLET						
PTH-S2-350E	350	770	7.0	RED	100	130	230	24	165	22
PTH-S2-525E	525	1155	10.5	GREEN						
PTH-S2-750E	750	1650	15.0	SILVER						
PTH-S2-1000E	1000	2200	20.0	BLUE						
PTH-S2-1052E	1050	2310	21.0	GREEN						
PTH-S2-1092E	1090	2398	21.8	VIOLET+BROWN						
PTH-S2-1302E	1300	2860	26.0	RED+BROWN						
PTH-S2-1452E	1450	3190	29.0	ORANGE+WHITE						
PTH-S2-1502E	1500	3300	30.0	SILVER						
PTH-S2-1592E	1590	3498	31.8	VIOLET+WHITE						
PTH-S2-1652E	1650	3630	33.0	GREEN+BROWN	260	134	330	30	190	27
PTH-S2-1802E	1800	3960	36.0	RED+WHITE						
PTH-S2-2002E	2000	4400	40.0	BLUE						
PTH-S2-2102E	2100	4620	42.0	SILVER+BROWN						
PTH-S2-2152E	2150	4730	43.0	GREEN+WHITE						
PTH-S2-2602E	2600	5720	52.0	BLUE+BROWN						
PTH-S2-3102E	3100	6820	62.0	BLUE+WHITE						
PTH-S2-3184E	3180	6996	63.6	VIOLET+WHITE						
PTH-S2-3304E	3300	7260	66.0	GREEN+BROWN						
PTH-S2-3604E	3600	7920	72.0	RED+WHITE						
PTH-S2-4004E	4000	8800	80.0	BLUE	220	260	340	36	193	33
PTH-S2-4204E	4200	9240	84.0	SILVER+BROWN						
PTH-S2-4304E	4300	9460	86.0	GREEN+WHITE						
PTH-S2-5204E	5200	11440	104.0	BLUE+BROWN						
PTH-S2-6204E	6200	13640	124.0	BLUE+WHITE						

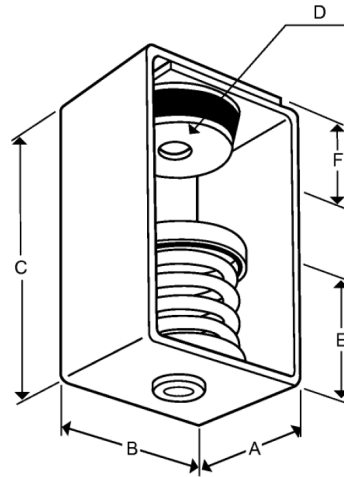
## PTH-S3 TYPE

### 75mm DEFLECTION SPRING VIBRATION ISOLATING HANGER

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Colour Code	(A)	(B)	(C)	(D)	(E)	Maximum Rod Dia. (MRD)
	(Kgs)	(Lbs)								
PTH-S3-80E	80	176	1.07	WHITE						
PTH-S3-125E	125	275	1.67	YELLOW						
PTH-S3-180E	180	396	2.40	ORANGE	100	130	250	15	188	12
PTH-S3-255E	255	561	3.40	VIOLET						
PTH-S3-375E	375	825	5.00	RED						
PTH-S3-555E	555	1221	7.40	VIOLET						
PTH-S3-810E	810	1782	10.80	RED	125	155	270	18	209	16
PTH-S3-1065E	1065	2343	14.20	RED+BROWN						

We reserve the right to change without notice for error rectification or design modification.



Model: PTH-SG

## PTH-SG TYPE

### 25mm DEFLECTION SPRING AND RUBBER VIBRATION ISOLATING HANGER

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Colour Code	(A)	(B)	(C)	(D)	(E)	(F)	Maximum Rod Dia. (MRD)
	(Kgs)	(Lbs)									
PTH-SG-10	10	22	0.4	GREEN							
PTH-SG-15	15	33	0.6	BLUE							
PTH-SG-25	25	55	1.0	WHITE							
PTH-SG-35	35	77	1.4	YELLOW							
PTH-SG-50	50	110	2.0	ORANGE	60	85	180	15	92	34	14
PTH-SG-80	80	176	3.2	VIOLET							
PTH-SG-120	120	264	4.8	RED							
PTH-SG-175E	175	385	7.0	SILVER							
PTH-SG-225E	225	495	9.0	BROWN							
PTH-SG-150	150	330	6.0	ORANGE							
PTH-SG-200	200	440	8.0	VIOLET							
PTH-SG-300	300	660	12.0	RED	85	115	225	18	115	48	16
PTH-SG-450	450	990	18.0	GREEN							
PTH-SG-600E	600	1320	24.0	SILVER							
PTH-SG-825E	825	1815	33.0	BROWN	100	130	265	20	117	59	18
PTH-SG-1100E	1100	2420	44.0	BLUE							
PTH-SG-1202E	1200	2640	48.0	SILVER							
PTH-SG-1502E	1500	3300	60.0	GREEN+BROWN							
PTH-SG-1652E	1650	3630	66.0	BROWN							
PTH-SG-1802E	1800	3960	72.0	SILVER+BROWN							
PTH-SG-1952E	1950	4290	78.0	BROWN+WHITE	240	134	340	30	145	84	27
PTH-SG-2202E	2200	4840	88.0	BLUE							
PTH-SG-2252E	2250	4950	90.0	BROWN+BROWN							
PTH-SG-2502E	2500	5500	100.0	BLUE+WHITE							
PTH-SG-2802E	2800	6160	112.0	BLUE+BROWN							
PTH-SG-3004E	3000	6600	120.0	GREEN+BROWN							
PTH-SG-3304E	3300	7260	132.0	BROWN							
PTH-SG-3604E	3600	7920	144.0	SILVER+BROWN							
PTH-SG-3904E	3900	8580	156.0	BROWN+WHITE							
PTH-SG-4404E	4400	9680	176.0	BLUE	230	290	455	36	148	93	33
PTH-SG-4504E	4500	9900	180.0	BROWN+BROWN							
PTH-SG-5004E	5000	11000	200.0	BLUE+WHITE							
PTH-SG-5604E	5600	12320	224.0	BLUE+BROWN							

We reserve the right to change without notice for error rectification or design modification.

## PTH-SG2 TYPE

### 50mm DEFLECTION SPRING AND RUBBER VIBRATION ISOLATING HANGER

(mm)

Model	Rated Capacity		Spring Constant (Kg/mm)	Spring Colour Code	(A)	(B)	(C)	(D)	(E)	(F)	Maximum Rod Dia. (MRD)
	(Kgs)	(Lbs)									
PTH-SG2-25	25	55	0.5	WHITE							
PTH-SG2-35	35	77	0.7	YELLOW							
PTH-SG2-50	50	110	1.0	ORANGE							
PTH-SG2-80E	80	176	1.6	VIOLET	85	115	230	15	133	34	14
PTH-SG2-125E	125	275	2.5	RED							
PTH-SG2-175E (S)	175	385	3.5	SILVER							
PTH-SG2-250E	250	550	5.0	BROWN							
PTH-SG2-175E (M)	175	385	3.5	ORANGE							
PTH-SG2-245E	245	539	4.9	VIOLET	100	130	270	18	165	48	16
PTH-SG2-350E	350	770	7.0	RED							
PTH-SG2-525E	525	1155	10.5	GREEN							
PTH-SG2-750E	750	1650	15.0	SILVER	100	130	270	20	165	59	18
PTH-SG2-1000E	1000	2200	20.0	BLUE							
PTH-SG2-1052EM	1050	2310	21.0	GREEN							
PTH-SG2-1092EM	1090	2398	21.8	VIOLET+BROWN							
PTH-SG2-1302EM	1300	2860	26.0	RED+BROWN							
PTH-SG2-1452EM	1450	3190	29.0	ORANGE+WHITE							
PTH-SG2-1502EM	1500	3300	30.0	SILVER							
PTH-SG2-1592EM	1590	3498	31.8	VIOLET+WHITE							
PTH-SG2-1652EM	1650	3630	33.0	GREEN+BROWN	270	134	385	30	190	84	27
PTH-SG2-1802EM	1800	3960	36.0	RED+WHITE							
PTH-SG2-2002EM	2000	4400	40.0	BLUE							
PTH-SG2-2102EM	2100	4620	42.0	SILVER+BROWN							
PTH-SG2-2152EM	2150	4730	43.0	GREEN+WHITE							
PTH-SG2-2602EM	2600	5720	52.0	BLUE+BROWN							
PTH-SG2-3102EM	3100	6820	62.0	BLUE+WHITE							
PTH-SG2-3184 EM	3180	6996	63.6	VIOLET+WHITE							
PTH-SG2-3304 EM	3300	7260	66.0	GREEN+BROWN							
PTH-SG2-3604 EM	3600	7920	72.0	RED+WHITE							
PTH-SG2-4004 EM	4000	8800	80.0	BLUE	300	240	400	36	202	95	33
PTH-SG2-4204 EM	4200	9240	84.0	SILVER+BROWN							
PTH-SG2-4304 EM	4300	9460	86.0	GREEN+WHITE							
PTH-SG2-5204 EM	5200	11440	104.0	BLUE+BROWN							
PTH-SG2-6204 EM	6200	13640	124.0	BLUE+WHITE							

We reserve the right to change without notice for error rectification or design modification.

NOTE-1: All springs are laterally stable and suitable for free standing application. (Outside diameter shall not less than 0.8 times of compressed height)

NOTE-2: All springs are designed with additional travel to solid at least 50% of rated load.

NOTE-3: Please refer to relevant brochure or our technical division for greater deflection and loading.

## INSTALLATION INSTRUCTION:

- 1) Consider the height and location of the hanger, then prepare the upper & lower hanging rods (bolts) in same proper length.
- 2) Attach the upper hanging rod (bolt) to the ceiling.
- 3) Connect the lower hanging rod (bolt) to the hanger. Pre-compress the hanger spring element (approx. 10mm) by tighten a restrain nut and washer at the bottom of the hanger.
- 4) Attach the hanger to the upper hanging rod (bolt).
- 5) Attach the hanging rod (bolt) to the pipe, duct or equipment bracket.
- 6) Install all other hangers by repeating instruction 1~5.
- 7) After the pipe or equipment is filled with water, release the restraint nut. Leveling adjust the hanger by the nut at the top of the element to obtain even level installation.
- 8) Final check the spring hanger in a proper deflection and don't install the hanging rod (bolt in a inclined position).