

Housed Spring Mounts

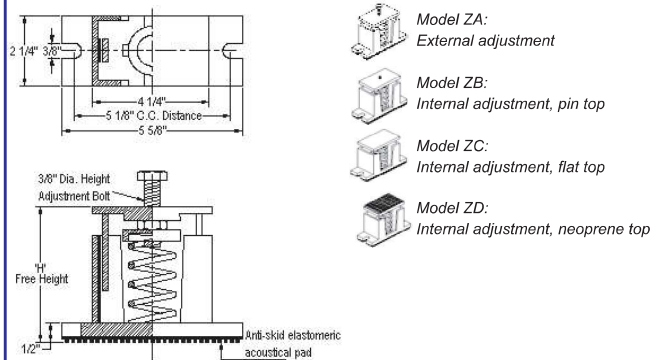


Features + Application Information

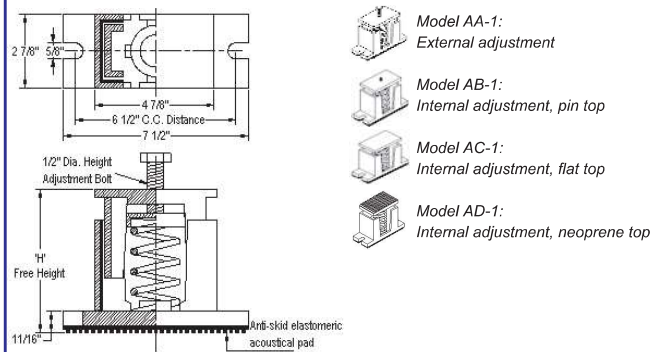
1. Powder coated cast iron housings (70-110 micron ASTM D4138-07a)
2. Internal elastomeric snubbers prevent metal to metal contact
3. Anti-skid elastomeric acoustical pad
4. Built-in leveling device
5. Adjust mounting so that upper housing clears lower housing by at least 1/4" but not more than 1/2"
6. Spring elements color-coded for easy field verification
7. Consult spring chart on page 23 for isolator performance data

Dimensional + Model Selection Data

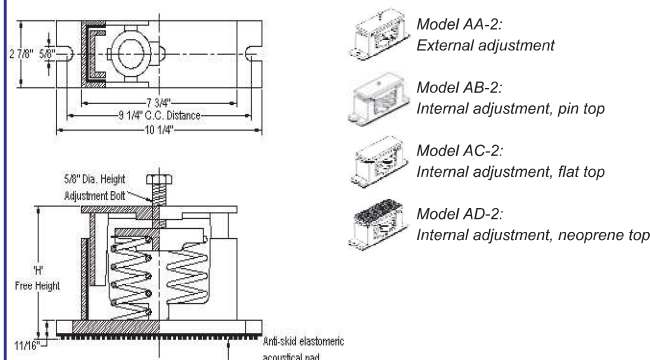
ZA / ZB / ZC / ZD models



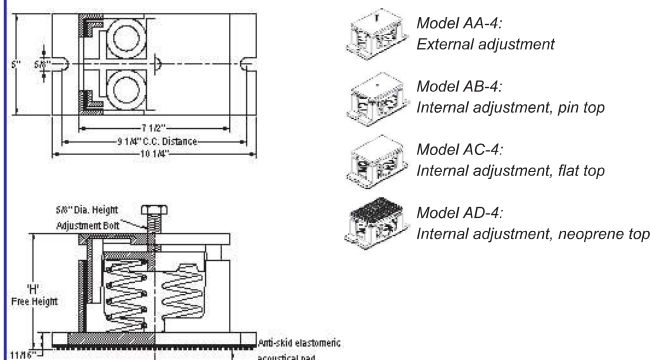
AA-1 / AB-1 / AC-1 / AD-1 models



AA-2 / AB-2 / AC-2 / AD-2 models



AA-4 / AB-4 / AC-4 / AD-4 models



(Refer to page 2 for isolator star rating system)

1" deflection series ★★

Model	Load Range (lbs)	H
* ZA/ZB/ZC/ZD-121	1 to 50	ZA: 4" ZB: 4-1/4" ZC: 4-1/4" ZD: 4-1/2"
* ZA/ZB/ZC/ZD-122	51 to 80	
* ZA/ZB/ZC/ZD-123	81 to 130	
* ZA/ZB/ZC/ZD-124	131 to 210	
* ZA/ZB/ZC/ZD-125	211 to 300	
* ZA/ZB/ZC/ZD-126	301 to 370	
* ZA/ZB/ZC/ZD-127	371 to 700	
* AA/AB/AC/AD-1-109	701 to 750	AA-1: 5-1/2" AB-1: 5-7/8" AC-1: 5-7/8" AD-1: 6-1/8"
* AA/AB/AC/AD-1-110	751 to 910	
* AA/AB/AC/AD-1-111	911 to 1080	
* AA/AB/AC/AD-1-112	1081 to 1250	
* AA/AB/AC/AD-1-109-113	1251 to 1330	
* AA/AB/AC/AD-1-110-113	1331 to 1380	
* AA/AB/AC/AD-1-111-113	1381 to 1550	
* AA/AB/AC/AD-1-112-113	1551 to 1832	
* AA/AB/AC/AD-2-111	1833 to 2160	AA-2: 5-3/4" AB-2: 6-1/4" AC-2: 6-1/4" AD-2: 6-1/2"
* AA/AB/AC/AD-2-112	2161 to 2500	
* AA/AB/AC/AD-2-109-113	2501 to 2660	
* AA/AB/AC/AD-2-110-113	2661 to 2760	
* AA/AB/AC/AD-2-111-113	2761 to 3100	
* AA/AB/AC/AD-2-112-113	3101 to 3665	
* AA/AB/AC/AD-4-111	3666 to 4330	
* AA/AB/AC/AD-4-112	4331 to 5000	AA-4: 6" AB-4: 6-1/2" AC-4: 6-1/2" AD-4: 6-3/4"
* AA/AB/AC/AD-4-109-113	5001 to 5330	
* AA/AB/AC/AD-4-110-113	5331 to 5530	
* AA/AB/AC/AD-4-111-113	5531 to 6200	
* AA/AB/AC/AD-4-112-113	6201 to 7330	

2" deflection series ★★

Model	Load Range (lbs)	H
* AA/AB/AC/AD-1-081	1 to 40	AA-1: 5-1/2" AB-1: 5-7/8" AC-1: 5-7/8" AD-1: 6-1/8"
* AA/AB/AC/AD-1-082	41 to 60	
* AA/AB/AC/AD-1-083	61 to 110	
* AA/AB/AC/AD-1-084	111 to 195	
* AA/AB/AC/AD-1-085	196 to 350	
* AA/AB/AC/AD-1-086	351 to 450	
* AA/AB/AC/AD-1-087	451 to 606	
* AA/AB/AC/AD-1-142-146B	607 to 667	AA-1: 6-1/2" AB-1: 6-7/8" AC-1: 6-7/8" AD-1: 7-1/8"
* AA/AB/AC/AD-1-147	668 to 1190	
* AA/AB/AC/AD-1-148A	1191 to 1576	
* AA/AB/AC/AD-1-147-146B	1577 to 1690	
* AA/AB/AC/AD-1-148A-146B	1691 to 2076	AA-2: 6-3/4" AB-2: 7-1/4" AC-2: 7-1/4" AD-2: 7-1/2"
* AA/AB/AC/AD-2-147	2077 to 2380	
* AA/AB/AC/AD-2-148A	2381 to 3152	
* AA/AB/AC/AD-2-147-146B	3153 to 3380	
* AA/AB/AC/AD-2-148A-146B	3381 to 4152	AA-4: 7" AB-4: 7-1/2" AC-4: 7-1/2" AD-4: 7-3/4"
* AA/AB/AC/AD-4-147	4153 to 4760	
* AA/AB/AC/AD-4-148A	4761 to 6305	
* AA/AB/AC/AD-4-147-146B	6306 to 6760	
* AA/AB/AC/AD-4-148A-146B	6761 to 8305	

* Choose appropriate model based on mounting style diagrams on left

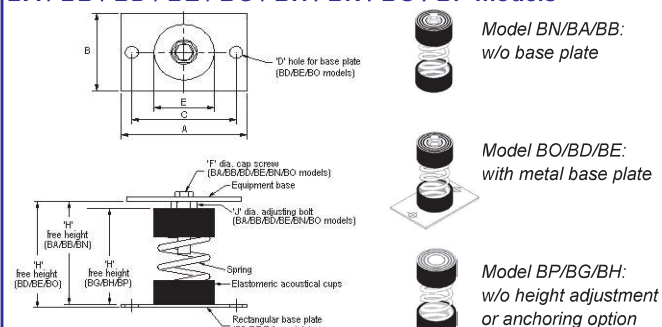
Features + Application Information

1. Large diameter laterally stable springs
2. Anti-skid elastomeric acoustical cup / pad
3. Built-in leveling device (except BP/BG/BH series)
4. Spring elements color-coded for easy field verification

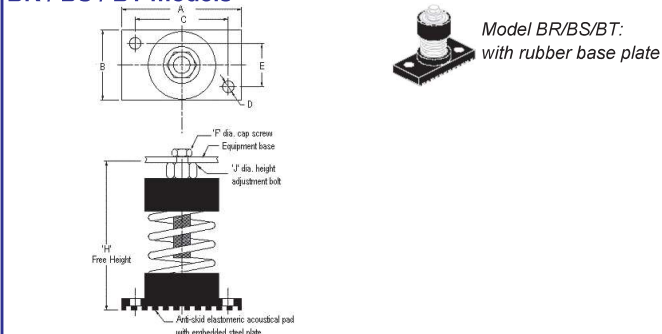
5. Consult spring chart on page 23 for isolator performance data

Dimensional + Model Selection Data

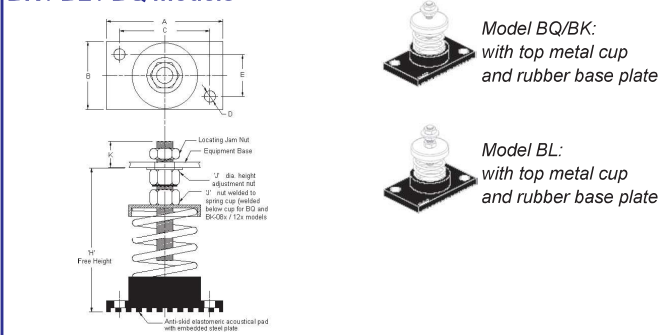
BA / BB / BD / BE / BG / BH / BN / BO / BP models



BR / BS / BT models



BK / BL / BQ models



Mount Series	Dimensions						
	A	B	C	D	E	F	J
BA	n/a	n/a	n/a	n/a	2-3/8"	3/8"	5/8"
BB	n/a	n/a	n/a	n/a	2-7/8"	3/8"	5/8"
BD	6"	4"	5"	5/8"	2-3/8"	3/8"	5/8"
BE	6"	4"	5"	5/8"	2-7/8"	3/8"	5/8"
BG	n/a	n/a	n/a	n/a	2-3/8"	n/a	n/a
BH	n/a	n/a	n/a	n/a	2-7/8"	n/a	n/a
BK	4-1/2"	2-1/2"	3-1/2"	3/8"	1-1/2"	n/a	3/8"
BL	5"	3"	3-3/4"	5/8"	1-13/16"	n/a	5/8"
BN	n/a	n/a	n/a	n/a	1-1/2"	1/4"	3/8"
BO	4"	2"	3"	3/8"	1-1/2"	1/4"	3/8"
BP	n/a	n/a	n/a	n/a	1-1/2"	n/a	n/a
BQ	3-1/2"	1-5/8"	2-1/2"	3/8"	5/8"	n/a	3/8"
BR	3-1/2"	1-5/8"	2-1/2"	3/8"	5/8"	1/4"	3/8"
BS	4-1/2"	2-1/2"	3-1/2"	3/8"	1-1/2"	3/8"	5/8"
BT	5"	3"	3-3/4"	5/8"	1-13/16"	3/8"	5/8"

(Refer to page 2 for isolator star rating system)

WELD FREE CONSTRUCTION

0.75" deflection series ★★☆☆

Model	Load Range (lbs)	H
* BN/BO/BP/BQ/BR-021	1 to 25	BN : 2-1/2"
* BN/BO/BP/BQ/BR-022	26 to 55	BO : 2-5/8"
* BN/BO/BP/BQ/BR-023	56 to 85	BP : 2"
* BN/BO/BP/BQ/BR-024	86 to 125	BQ : 2-7/8"
		BR : 2-5/8"

1" deflection series ★★☆☆

Model	Load Range (lbs)	H
* BN/BO/BP/BQ/BR-041	1 to 15	BN : 3-1/4"
* BN/BO/BP/BQ/BR-042	16 to 35	BO : 3-3/8"
* BN/BO/BP/BQ/BR-043	36 to 65	BP : 2-3/4"
* BN/BO/BP/BQ/BR-044	66 to 90	BQ : 3-1/4"
* BN/BO/BP/BQ/BR-045	91 to 185	BR : 3-3/8"
* BA/BD/BG/BK/BS-124	186 to 210	BA : 4-1/2"
* BA/BD/BG/BK/BS-125	211 to 300	BD : 4-5/8"
* BA/BD/BG/BK/BS-126	301 to 370	BG : 3-3/4"
* BA/BD/BG/BK/BS-127	371 to 700	BK : 4"
		BS : 4-1/2"
* BB/BE/BH/BL/BT-156	701 to 750	BB : 5-1/2"
* BB/BE/BH/BL/BT-157	751 to 910	BE : 5-5/8"
* BB/BE/BH/BL/BT-158	911 to 1500	BH : 4-3/4"
* BB/BE/BH/BL/BT-159	1501 to 2082	BL : 5-7/8"
* BB/BE/BH/BL/BT-159-161	2083 to 2603	BT : 5-1/2"

2" deflection series ★★☆☆

Model	Load Range (lbs)	H
* BA/BD/BG/BK/BS-081	1 to 40	BA : 5-3/4"
* BA/BD/BG/BK/BS-082	41 to 60	
* BA/BD/BG/BK/BS-083	61 to 110	
* BA/BD/BG/BK/BS-084	111 to 195	
* BA/BD/BG/BK/BS-085	196 to 350	
* BA/BD/BG/BK/BS-086	351 to 450	BK : 5-1/4"
* BA/BD/BG/BK/BS-087	451 to 606	BS : 5-3/4"
* BB/BE/BH/BL/BT-206	607 to 870	BB : 7-7/8"
* BB/BE/BH/BL/BT-207	871 to 1157	BE : 8"
* BB/BE/BH/BL/BT-206-219	1158 to 1540	BH : 7-1/8"
* BB/BE/BH/BL/BT-207-219	1541 to 1827	BL : 8-1/4"
		BT : 7-7/8"

3" deflection series ★★☆☆

Model	Load Range (lbs)	H
* BB/BE/BH/BL/BT-181	1 to 100	BB : 7-7/8"
* BB/BE/BH/BL/BT-182	101 to 160	
* BB/BE/BH/BL/BT-183	161 to 220	
* BB/BE/BH/BL/BT-184	221 to 332	
* BB/BE/BH/BL/BT-185	333 to 600	
* BB/BE/BH/BL/BT-186	601 to 890	BH : 7-1/8"
* BB/BE/BH/BL/BT-187	891 to 1157	BL : 8-1/4"
* BB/BE/BH/BL/BT-186-199	1158 to 1540	BT : 7-7/8"
* BB/BE/BH/BL/BT-187-199	1541 to 1825	

* Choose appropriate model based on mounting style diagrams on left

Free Standing Spring Mounts - Welded



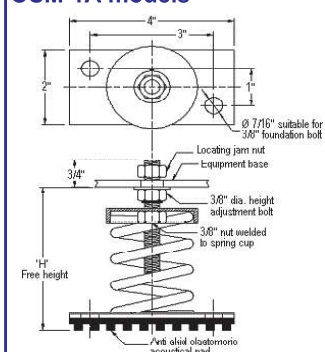
Features + Application Information

1. Large diameter laterally stable springs
2. Anti-skid elastomeric acoustical pad
3. Built-in leveling device
4. Spring elements color-coded for easy field verification

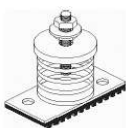
5. Consult spring chart on page 23 for isolator performance data

Dimensional + Model Selection Data

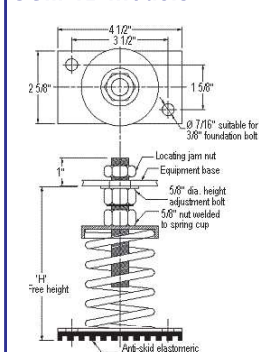
OSM-1A models



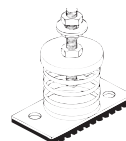
- *WELDED CONSTRUCTION (CUP TYPE)
- *Mounting holes furnished standard
- *Galvanized finish



OSM-1B models



- *WELDED CONSTRUCTION (CUP TYPE)
- *Mounting holes furnished standard
- *Galvanized finish



(Refer to page 2 for isolator star rating system)

WELDED CONSTRUCTION

1" deflection series ★★☆☆

Model	Load Range (lbs)	H
OSM-1A-121	1 to 50	3-3/4"
OSM-1A-122	51 to 80	
OSM-1A-123	81 to 130	
OSM-1A-124	131 to 210	
OSM-1A-125	211 to 300	
OSM-1A-126	301 to 370	
OSM-1A-127	371 to 700	5-5/8"
OSM-1B-156	701 to 750	
OSM-1B-157	751 to 910	
OSM-1B-158	911 to 1500	
OSM-1B-159	1501 to 2082	
OSM-1B-159-161	2083 to 2603	

2" deflection series ★★☆☆★

Model	Load Range (lbs)	H
OSM-1A-081	1 to 40	5"
OSM-1A-082	41 to 60	
OSM-1A-083	61 to 110	
OSM-1A-084	111 to 195	
OSM-1A-085	196 to 350	
OSM-1A-086	351 to 450	
OSM-1A-087	451 to 606	7-3/4"
OSM-1B-206	607 to 875	
OSM-1B-207	876 to 1157	
OSM-1B-206-219	1158 to 1540	
OSM-1B-207-219	1541 to 1827	

3" deflection series ★★☆☆★☆☆

Model	Load Range (lbs)	H
OSM-1B-181	1 to 100	7-3/4"
OSM-1B-182	101 to 160	
OSM-1B-183	161 to 220	
OSM-1B-184	221 to 332	
OSM-1B-185	333 to 600	
OSM-1B-186	601 to 890	
OSM-1B-187	891 to 1157	
OSM-1B-186-199	1158 to 1540	
OSM-1B-187-199	1541 to 1825	

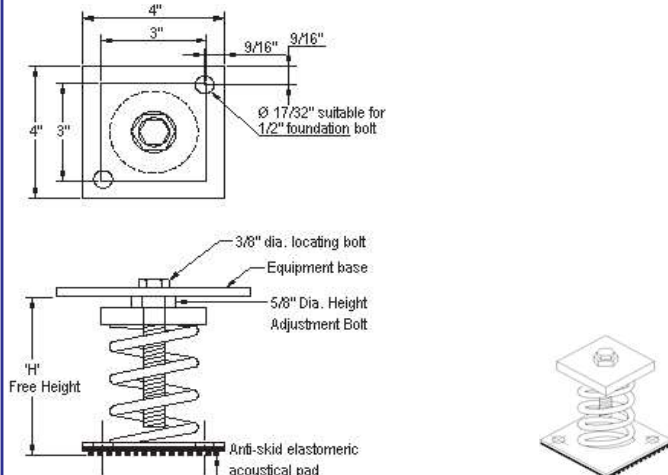
Features + Application Information

1. Large diameter laterally stable springs
2. Welded steel construction & galvanized finish
3. Anti-skid elastomeric acoustical pad
4. Mounting holes furnished as standard

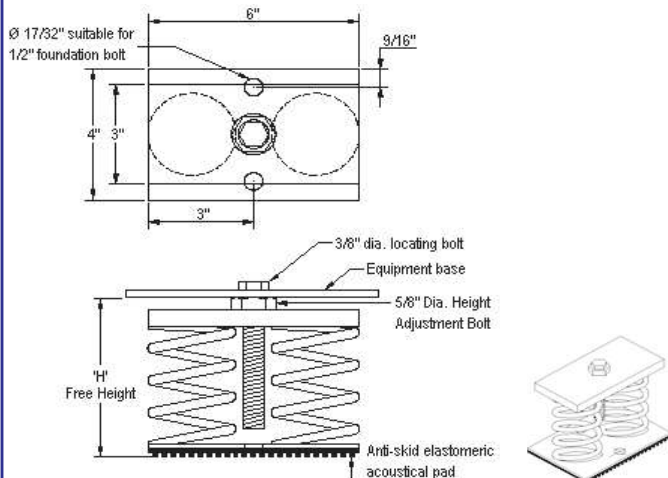
5. Built-in leveling device
6. Spring elements color-coded for easy field verification
7. Consult spring chart on page 23 for isolator performance data

Dimensional + Model Selection Data

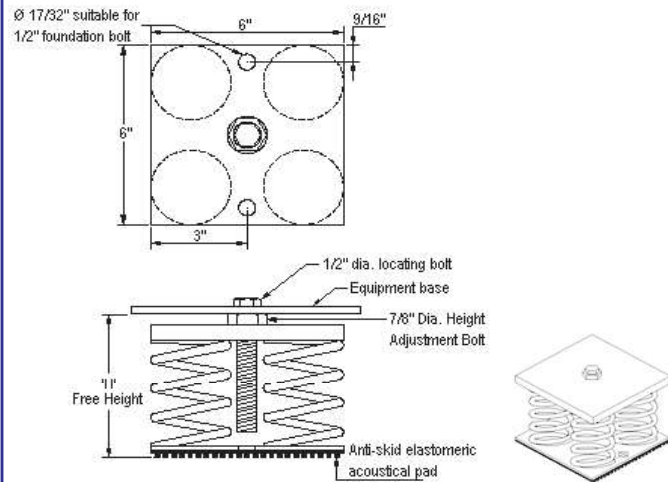
OSM-1 models



OSM-2 models



OSM-4 models



	Model	Load Range (lbs)	H
1" deflection series ★★	OSM-1-150	1 to 100	4-7/8"
	OSM-1-151	101 to 180	
	OSM-1-152	181 to 270	
	OSM-1-153	271 to 370	
	OSM-1-154	371 to 500	
	OSM-1-155	501 to 620	
	OSM-1-156	621 to 750	
	OSM-1-157	751 to 910	
	OSM-1-158	911 to 1500	4-7/8"
	OSM-1-159	1501 to 2082	
	OSM-1-159-161	2083 to 2603	
	OSM-2-158	2604 to 3000	5-1/8"
	OSM-2-159	3001 to 4166	
	OSM-2-159-161	4167 to 5207	
	OSM-4-158	5208 to 6000	
	OSM-4-159	6001 to 8332	5-1/8"
	OSM-4-159-161	8333 to 10416	
	Model	Load Range (lbs)	H
2" deflection series ★★	OSM-1-081	1 to 40	5-1/4"
	OSM-1-082	41 to 60	
	OSM-1-083	61 to 110	
	OSM-1-084	111 to 195	
	OSM-1-085	196 to 350	
	OSM-1-086	351 to 450	
	OSM-1-087	451 to 606	5-1/4"
	OSM-2-085	607 to 700	
	OSM-2-086	701 to 900	
	OSM-2-087	901 to 1212	6-1/4"
	OSM-2-142A-146B	1213 to 1334	
	OSM-2-147	1335 to 2380	
	OSM-2-148A	2381 to 3152	
	OSM-2-147-146B	3153 to 3380	6-1/2"
	OSM-2-148A-146B	3381 to 4152	
	OSM-4-147	4153 to 4760	
	OSM-4-148A	4761 to 6306	
	OSM-4-147-146B	6307 to 6760	6-1/2"
	OSM-4-148A-146B	6761 to 8306	
	Model	Load Range (lbs)	H
3" deflection series ★★	OSM-1-181	1 to 100	7-1/4"
	OSM-1-182	101 to 160	
	OSM-1-183	161 to 220	
	OSM-1-184	221 to 332	
	OSM-1-185	333 to 600	
	OSM-1-186	601 to 890	
	OSM-1-187	891 to 1157	
	OSM-1-186-199	1158 to 1540	
	OSM-1-187-199	1541 to 1825	7-1/4"
	OSM-2-187	1826 to 2315	
	OSM-2-186-199	2316 to 3080	
	OSM-2-187-199	3081 to 3650	7-1/2"
	OSM-4-187	3651 to 4630	
	OSM-4-186-199	4631 to 6160	
	OSM-4-187-199	6161 to 7310	

Vertically Restrained Spring Mounts

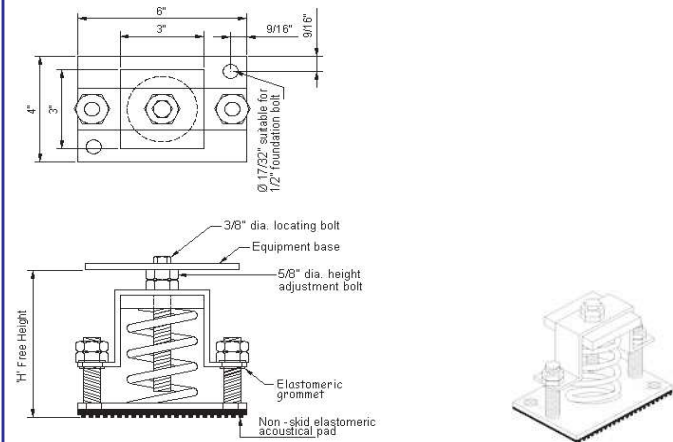


Features + Application Information

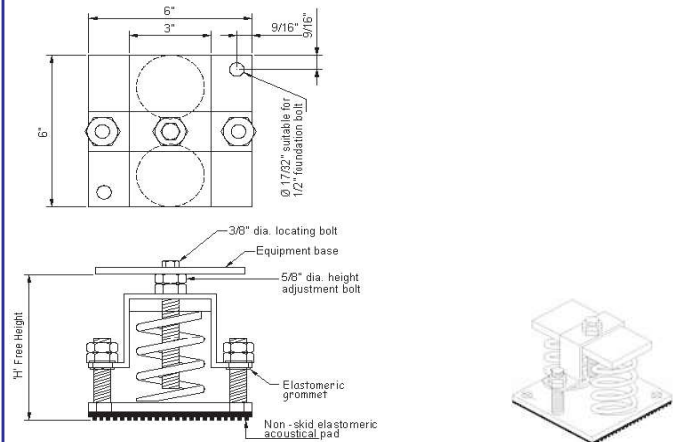
- Applications requiring vertical restraint due to reduced equipment loads or large external forces e.g. wind
- Welded steel construction & galvanized finish
- Mounting holes furnished as standard
- Elastomeric 'non-short circuiting' grommets
- Built-in leveling device
- Spring elements color-coded for easy field verification
- Consult spring chart on page 23 for isolator performance data

Dimensional + Model Selection Data

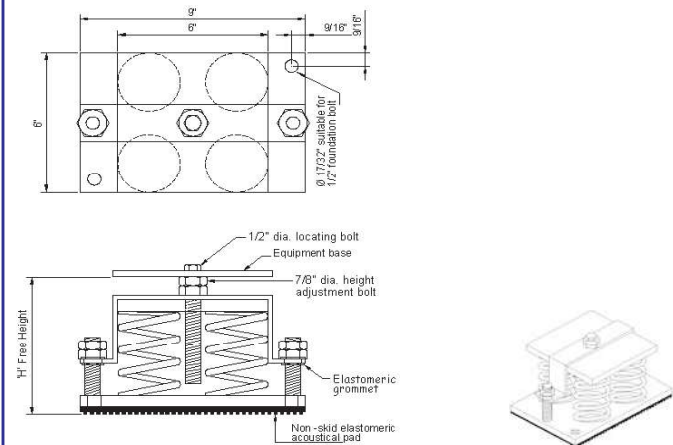
RSM-1 models



RSM-2 models



RSM-4 models



* **RESTRICTO™** assembly limits vertical movement due to reduced loads or external forces (wind loads)

* Adjust **RESTRICTO™** assembly vertical limiting nuts as per clearance levels specified by project engineer (standard: 1/4", maximum: 1/2")

	Model	Load Range (lbs)	H
★ ★ ★ 1" deflection series	RSM-1-150	1 to 100	5-7/8"
	RSM-1-151	101 to 180	
	RSM-1-152	181 to 270	
	RSM-1-153	271 to 370	
	RSM-1-154	371 to 500	
	RSM-1-155	501 to 620	
	RSM-1-156	621 to 750	
	RSM-1-157	751 to 910	
	RSM-1-158	911 to 1500	
	RSM-1-159	1501 to 2082	
	RSM-1-159-161	2083 to 2603	
	RSM-2-158	2604 to 3000	6"
	RSM-2-159	3001 to 4166	
	RSM-2-159-161	4167 to 5207	
	RSM-4-158	5208 to 6000	6-1/2"
	RSM-4-159	6001 to 8332	
	RSM-4-159-161	8333 to 10416	
	Model	Load Range (lbs)	H
★ ★ ★ 2" deflection series	RSM-1-081	1 to 40	7-1/4"
	RSM-1-082	41 to 60	
	RSM-1-083	61 to 110	
	RSM-1-084	111 to 195	
	RSM-1-085	196 to 350	
	RSM-1-086	351 to 450	
	RSM-1-087	451 to 606	7-3/8"
	RSM-2-085	607 to 700	
	RSM-2-086	701 to 900	
	RSM-2-087	901 to 1212	7-3/8"
	RSM-2-142A-146B	1213 to 1334	
	RSM-2-147	1335 to 2380	
	RSM-2-148A	2381 to 3152	
	RSM-2-147-146B	3153 to 3380	7-7/8"
	RSM-2-148A-146B	3381 to 4152	
	RSM-4-147	4153 to 4760	
	RSM-4-148A	4761 to 6306	7-7/8"
	RSM-4-147-146B	6307 to 6760	
	RSM-4-148A-146B	6761 to 8306	
	Model	Load Range (lbs)	H
★ ★ ★ 3" deflection series	RSM-1-181	1 to 100	8-1/4"
	RSM-1-182	101 to 160	
	RSM-1-183	161 to 220	
	RSM-1-184	221 to 332	
	RSM-1-185	333 to 600	
	RSM-1-186	601 to 890	
	RSM-1-187	891 to 1157	
	RSM-1-186-199	1158 to 1540	
	RSM-1-187-199	1541 to 1825	
	RSM-2-187	1826 to 2315	8-3/8"
	RSM-2-186-199	2316 to 3080	
	RSM-2-187-199	3081 to 3650	
	RSM-4-187	3651 to 4630	8-7/8"
	RSM-4-186-199	4631 to 6160	
	RSM-4-187-199	6161 to 7310	

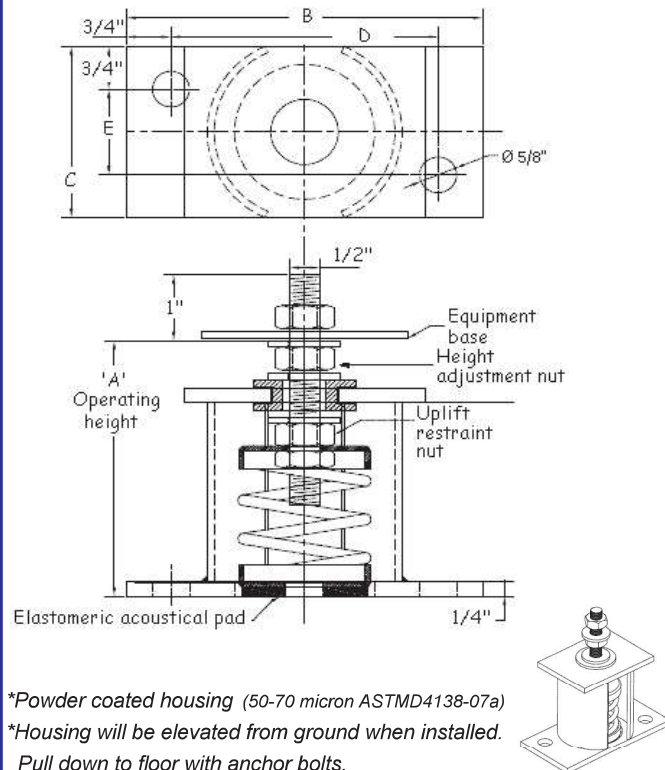
Features + Application Information

1. Large diameter laterally stable springs
2. Welded steel construction
3. Built-in leveling device
4. Mounting holes furnished as standard

5. All isolators certified to withstand minimum 1.39 G force
6. Suitable for most seismic zone IV applications
7. Spring elements color-coded for easy field verification
8. Consult spring chart on page 23 for isolator performance data

Dimensional + Model Selection Data

SSMA-1 / SSMB-1 models

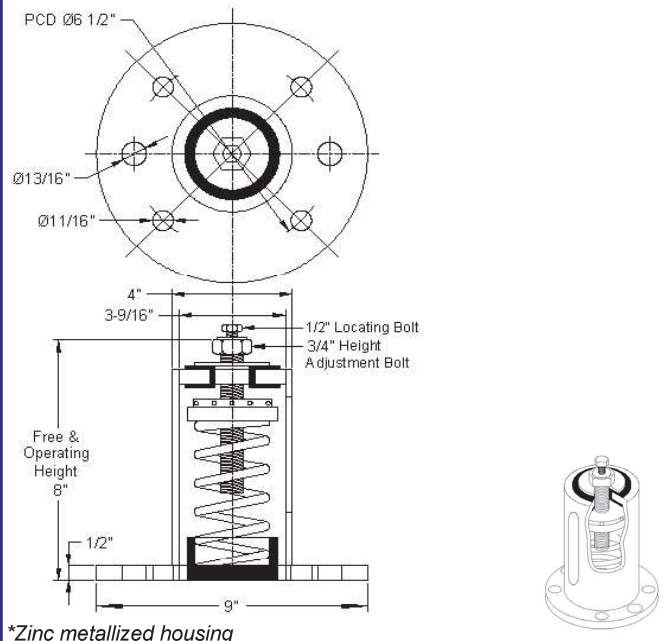


*Powder coated housing (50-70 micron ASTM D4138-07a)

*Housing will be elevated from ground when installed.
Pull down to floor with anchor bolts.

Mount Series	Dimensions				
	A	B	C	D	E
SSMA-1	4-5/8"	6"	3"	4-1/2"	1-1/2"
SSMB-1	7-3/8"	7"	4"	5-1/2"	2-1/2"

SSM-1 models



*Zinc metallized housing

(Refer to page 2 for isolator star rating system)

1" deflection series ★★ ★

Model	Load Range (lbs)	'G' Rating
SSMA-1-121	1 to 50	32.50
SSMA-1-122	51 to 80	19.69
SSMA-1-123	81 to 130	11.81
SSMA-1-124	131 to 210	7.51
SSMA-1-125	211 to 300	5.28
SSMA-1-126	301 to 370	4.33
SSMA-1-127	371 to 700	2.32
* SSMB/SSM-1-156	701 to 750	4.82 / 6.74
* SSMB/SSM-1-157	751 to 910	3.95 / 5.52
* SSMB/SSM-1-158	911 to 1500	2.41 / 3.37
* SSMB/SSM-1-159	1501 to 2082	1.73 / 2.42
* SSMB/SSM-1-159-161	2083 to 2603	1.39 / 1.94

2" deflection series ★★ ★★ ★

Model	Load Range (lbs)	'G' Rating
* SSMB/SSM-1-081	1 to 40	90.50 / 126.46
* SSMB/SSM-1-082	41 to 60	57.92 / 80.94
* SSMB/SSM-1-083	61 to 110	32.53 / 45.47
* SSMB/SSM-1-084	111 to 195	18.32 / 25.61
* SSMB/SSM-1-085	196 to 350	10.34 / 14.45
* SSMB/SSM-1-086	351 to 450	8.04 / 11.24
* SSMB/SSM-1-087	451 to 606	5.97 / 8.34
* SSMB/SSM-1-142-146B	607 to 667	4.45 / 6.22
* SSMB/SSM-1-147	668 to 1190	3.03 / 4.24
* SSMB/SSM-1-148A	1191 to 1576	2.29 / 3.20
* SSMB/SSM-1-147-146B	1577 to 1690	2.14 / 2.99
* SSMB/SSM-1-148A-146B	1691 to 2076	1.74 / 2.43

3" deflection series ★★ ★★ ★★ ★

Model	Load Range (lbs)	'G' Rating
SSM-1-181	1 to 100	47.05
SSM-1-182	101 to 160	30.42
SSM-1-183	161 to 220	22.48
SSM-1-184	221 to 332	15.21
SSM-1-185	333 to 600	8.32
SSM-1-186	601 to 890	5.67
SSM-1-187	891 to 1157	4.37
SSM-1-186-199	1158 to 1540	3.28
SSM-1-187-199	1541 to 1825	2.77

* Select SSM-1 models instead of SSMB-1 where higher 'G' ratings are required.

'G' ratings for SSMA-1 based on shake table testing at ISO 17025 accredited laboratory in accordance with ASCE 7-05 design parameters under OSHPD Special Seismic Certification Preapproval (OSP) program.

'G' ratings for SSM-1, SSMB-1 based on attachment to steel. For concrete ratings will be controlled by attachment methods + concrete strength.

