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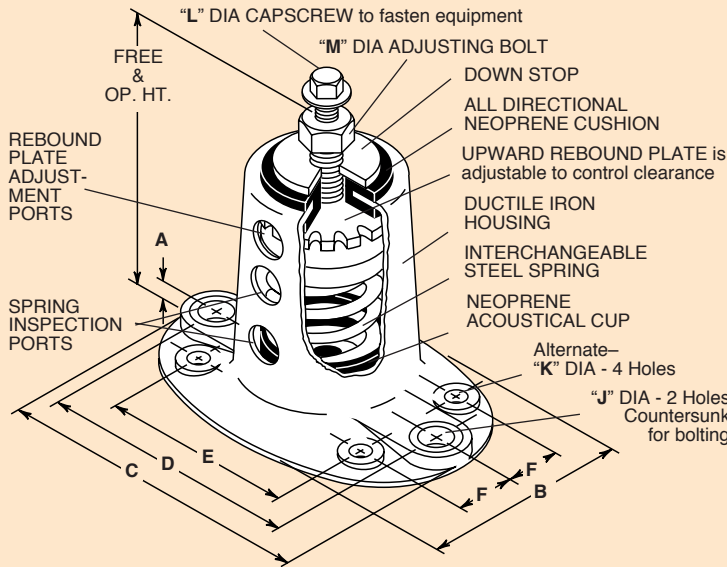
**CAPTIVE SPRING  
MOUNT for SEISMIC  
and RESTRAINED  
SERVICE 1" 25mm &  
2" 50mm DEFLECTION**

TYPE

# SSLFH

DATA SHEET DS-203-7

## 1" 25mm Deflection Spring Series



### TYPE SSLFH DIMENSIONS (inches mm)

Size	A	B	C	D	E	F	J	K	L	M	Free & Op Ht
SSLFH-A	1/4	4	6 1/4	4 3/4	4	1 1/8	3/4	1/2	3/8	3/4	6
SSLFH-B	1/2	6	9 1/4	7 1/2	5 1/2	1 5/8	3/4	5/8	1/2	7/8	7 1/2
SSLFH-C	1/2	7	11	9	6	2	7/8	3/4	5/8	1	8
SSLFH-A	6	102	159	121	102	29	19	13	10	19	152
SSLFH-B	13	152	235	191	140	41	19	16	13	22	191
SSLFH-C	13	178	279	229	152	51	22	19	16	25	203

### INSTALLATION INSTRUCTIONS

- Remove cap screw "L" and place mountings under hole in equipment base.
- If supports are badly off level, shim mounting level before securing.
- Pass cap screw "L" through hole in equipment base and screw loosely into adjusting bolt "M".
- Repeat this procedure in all mounting locations.
- Keep "Upward Rebound Plate" from turning by restraining it with a screw driver through the adjustment port.
- Take two full counter-clockwise turns on each adjusting bolt "M" and continue even adjustment of all mounts until all springs are loaded and mountings are back to Free and Operating Height.
- Take no more than two additional counter-clockwise turns on any "M" adjusting bolt to level equipment.
- Tighten cap screws "L" to secure equipment.
- Turn rebound plate clockwise to lower or counter-clockwise to raise. Adjust plate so there is 1/8"(3mm) clearance between top of plate and underside of all directional neoprene cushion.

### SPECIFICATION

Equipment shall be installed on resilient mountings designed and rated to resist seismic forces in all directions. The snubber shall be adjustable in the vertical up direction and allow a maximum of 1/4" (6mm) travel in the vertical and horizontal direction before contacting the resilient snubbing collars. Mountings shall have an Anchorage Preapproval "OPA" Number from OSHPD in the state of California attesting to the minimum listed certified Horizontal and Vertical load ratings.

All mountings shall have adjusting bolts that are rigidly bolted to the equipment.

Spring diameters shall be no less than 0.8 of the compressed height of the spring at rated load. Springs shall have a minimum additional travel to solid equal to 50% of the rated deflection. Mountings shall have a minimum of 2 spring inspection ports. Submittals shall include spring diameters, deflections, and calculations signed by a registered engineer showing that the seismic loads the mountings are to resist have been properly calculated. Mountings shall be Type SSLFH as manufactured by Mason Industries, Inc.

### TYPE SSLFH RATINGS

Size	Rated Capacity (lbs) (kg)	Rated Defl (in) (mm)	Mount Constant (lbs/in)(kg/mm)	Spring Color/Stripe	Max. G Rating	
SSLFH-A-45	45	20	1.60 41	28 0.5	Blue	37.8
SSLFH-A-75	75	34	1.50 38	50 0.9	Orange	22.7
SSLFH-A-125	125	57	1.33 34	94 1.7	Brown	13.6
SSLFH-A-200	200	91	1.15 29	174 3.1	Black	8.5
SSLFH-A-310	310	141	1.00 25	310 5.6	Yellow	5.5
SSLFH-A-400	400	181	1.00 25	400 7.2	Green	4.3
SSLFH-A-510	510	231	1.00 25	510 9.2	Red	3.3
SSLFH-A-625	625	283	1.00 25	625 11.3	White	2.7
SSLFH-B-65	65	29	2.10 53	31 0.6	Brown	47.7
SSLFH-B-85	85	39	2.10 53	40 0.7	White†	36.5
SSLFH-B-115	115	52	2.00 51	57 1.0	Silver	27.0
SSLFH-B-150	150	68	2.00 51	75 1.3	Orange	20.7
SSLFH-B-280	280	127	1.60 41	174 3.1	Green	11.1
SSLFH-B-450	450	204	1.31 33	344 6.2	Red	6.9
SSLFH-B-750	750	340	1.12 28	670 12.1	White	4.1
SSLFH-B-1000	1000	454	1.00 25	1000 18.2	Blue	3.1
SSLFH-B-1250	1250	567	1.00 25	1250 22.7	Gray	2.5
SSLFH-B-1650	1650	748	1.00 25	1650 30.0	Black	1.9
SSLFH-C-1000	1000	454	1.00 25	1000 18.2	Black	3.8
SSLFH-C-1350	1350	612	1.00 25	1350 24.5	Yellow	2.8
SSLFH-C-1750	1750	794	1.00 25	1750 31.8	Black*	2.2
SSLFH-C-2100	2100	953	1.00 25	2100 38.1	Yellow*	1.8
SSLFH-C-2385	2385	1082	1.00 25	2385 43.3	Yellow**	1.6
SSLFH-C-2650	2650	1202	1.00 25	2650 48.1	Red*	1.4
SSLFH-C-2935	2935	1331	1.00 25	2935 53.2	Red**	1.3

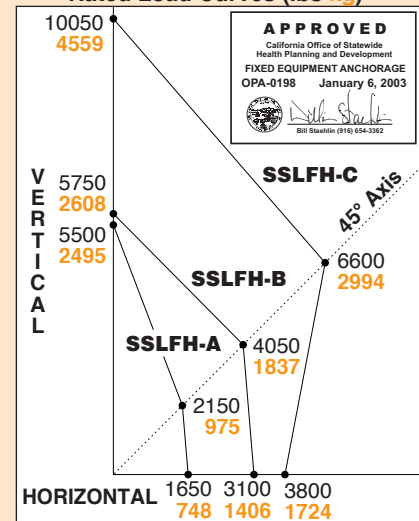
†with Black stripe \*with Red inner spring \*\*with Green inner spring

### SPRING CHARACTERISTICS (inches mm)

Size	Spring OD (in)(mm)	Free Ht. (in) (mm)	Ratio Kx/Ky	Ratio OD/OH
A-45-400	13/4 44	3 76	0.70-0.90	0.88-1.25
A-510-625	13/4 44	31/8-33/8 79-86	0.50-0.60	0.74-0.82
B	23/8 60	4 102	0.65-0.90	0.76-1.25
C	27/8 73	41/8 105	0.90-1.00	0.92

### OSHPD OPA-0198

#### Rated Load Curves (lbs kg)†



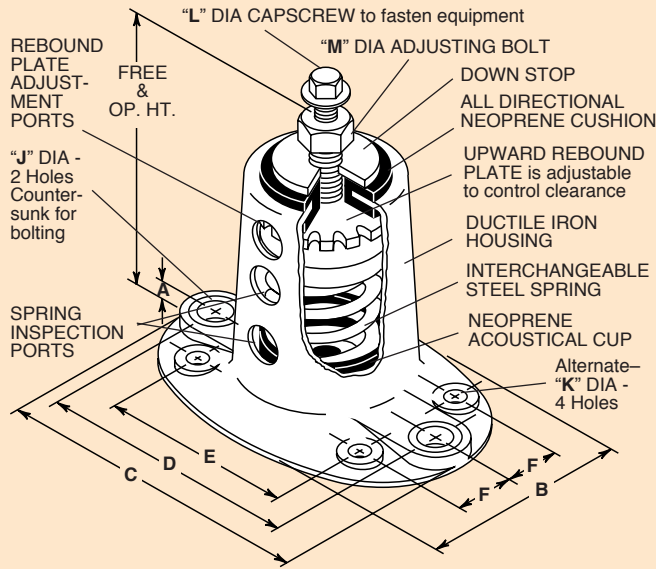
†For Kn divide Kg by 10.2.

Horizontal, Vertical and 45° plotted Ratings are California OSHPD approved values having the OSHPD Anchorage Preapproval Number OPA-0198. Testing and calculations were performed to meet OSHPD criteria.

#### To use approved OSHPD rated load curves:

- Calculate Vertical and Horizontal Forces on mountings including translations and overturning moments.
- Plot Horizontal Load vs Vertical Load. The point must fall within the area below the OSHPD curve.

## 2" 50mm Deflection Spring Series



### TYPE SSLFH RATINGS

Size	Rated Capacity (lbs) (kg)	Rated Defl (in) (mm)	Mount Constant (lbs/in) (kg/mm)	Spring Color/Stripe	Max. G Rating
SSLFH-B-20	20 <b>9</b>	2.40 <b>61</b>	8 <b>0.1</b>	Tan	155.0
SSLFH-B-26	26 <b>12</b>	2.18 <b>55</b>	12 <b>0.2</b>	White/Blue	119.2
SSLFH-B-35	35 <b>16</b>	2.20 <b>56</b>	16 <b>0.3</b>	Purple	88.6
SSLFH-B-50	50 <b>23</b>	2.20 <b>56</b>	24 <b>0.4</b>	White/Red	62.0
SSLFH-B-65	65 <b>30</b>	2.10 <b>53</b>	31 <b>0.6</b>	Brown	47.7
SSLFH-B-85	85 <b>39</b>	2.10 <b>53</b>	40 <b>0.7</b>	White/Black	36.5
SSLFH-B-115	115 <b>52</b>	2.00 <b>51</b>	57 <b>1.0</b>	Silver	27.0
SSLFH-B-150	150 <b>68</b>	2.00 <b>51</b>	75 <b>1.3</b>	Orange	20.7
SSLFH-B2-210	210 <b>95</b>	2.12 <b>54</b>	99 <b>1.8</b>	Silver	14.8
SSLFH-B2-290	290 <b>131</b>	2.00 <b>51</b>	144 <b>2.6</b>	Blue	10.7
SSLFH-B2-450 <sup>†</sup>	450 <b>204</b>	2.00 <b>51</b>	224 <b>4.0</b>	Tan	6.9
SSLFH-B2-680 <sup>†</sup>	680 <b>308</b>	2.00 <b>51</b>	340 <b>6.0</b>	Gray	4.6
SSLFH-C2-125	125 <b>57</b>	2.50 <b>64</b>	50 <b>0.9</b>	Purple	30.4
SSLFH-C2-170	170 <b>77</b>	2.40 <b>61</b>	70 <b>1.3</b>	Brown	22.4
SSLFH-C2-210	210 <b>95</b>	2.30 <b>58</b>	90 <b>1.6</b>	Red	18.1
SSLFH-C2-260	260 <b>118</b>	2.20 <b>56</b>	120 <b>2.1</b>	White	14.6
SSLFH-C2-330	330 <b>150</b>	2.00 <b>51</b>	165 <b>2.9</b>	Black	11.5
SSLFH-C2-460	460 <b>209</b>	2.00 <b>51</b>	230 <b>4.1</b>	Blue	8.3
SSLFH-C2-610	610 <b>277</b>	2.00 <b>51</b>	305 <b>5.4</b>	Green	6.2
SSLFH-C2-880 <sup>†</sup>	880 <b>399</b>	2.00 <b>51</b>	440 <b>7.8</b>	Gray	4.3
SSLFH-C2-1210 <sup>†</sup>	1210 <b>549</b>	2.00 <b>51</b>	605 <b>10.8</b>	Silver	3.1
SSLFH-C2-1540 <sup>†</sup>	1540 <b>699</b>	2.00 <b>51</b>	770 <b>13.7</b>	Gray*	2.5
SSLFH-C2-1870 <sup>†</sup>	1870 <b>848</b>	2.00 <b>51</b>	935 <b>16.6</b>	Silver*	2.0

\*with RED inner spring

<sup>†</sup>Published ratings allow minimum 25% additional travel to solid. For a full 50% specified minimum use the following ratings:

### TYPE SSLFH DIMENSIONS (inches mm)

Size	A	B	C	D	E	F	J	K	L	M	Free & Op Ht
SSLFH-B&B2	1/2	6	9 1/4	7 1/2	5 1/2	15/8	3/4	5/8	1/2	7/8	7 1/2
SSLFH-C2	1/2	7	11	9	6	2	7/8	3/4	5/8	1	8
SSLFH-B&B2	<b>13</b>	<b>152</b>	<b>235</b>	<b>191</b>	<b>140</b>	<b>41</b>	<b>19</b>	<b>16</b>	<b>13</b>	<b>22</b>	<b>191</b>
SSLFH-C2	<b>13</b>	<b>178</b>	<b>279</b>	<b>229</b>	<b>152</b>	<b>51</b>	<b>22</b>	<b>19</b>	<b>16</b>	<b>25</b>	<b>203</b>

Size	Derated Capacity (lbs) (kg)	Defl (in) (mm)	Size	Derated Capacity (lbs) (kg)	Defl (in) (mm)
B2-450	410 <b>186</b>	1.83 <b>46.5</b>	C2-1210	1010 <b>458</b>	1.67 <b>42.4</b>
B2-680	565 <b>256</b>	1.66 <b>42.2</b>	C2-1540	1285 <b>583</b>	1.67 <b>42.4</b>
C2-880	800 <b>363</b>	1.82 <b>46.2</b>	C2-1870	1560 <b>708</b>	1.67 <b>42.4</b>

### SPRING CHARACTERISTICS (inches mm)

Spring Size	OD	Free Height	Ratio Kx/Ky	Ratio OD/OH
B	23/8 <b>60</b>	4 <b>102</b>	0.55-0.90	0.95-1.48
B2	23/8 <b>60</b>	4 1/2 <b>114</b>	0.55-0.90	0.95-1.48
C2	27/8 <b>73</b>	5 <b>127</b>	0.63-0.85	0.96-1.15

### INSTALLATION INSTRUCTIONS

1. Remove cap screw "L" and place mountings under hole in equipment base.
2. If supports are badly off level, shim mounting level before securing.
3. Pass cap screw "L" through hole in equipment base and screw loosely into adjusting bolt "M".
4. Repeat this procedure in all mounting locations.
5. Keep "Upward Rebound Plate" from turning by restraining it with a screw driver through the adjustment port.
6. Take two full counter-clockwise turns on each adjusting bolt "M" and continue even adjustment of all mounts until all springs are loaded and mountings are back to Free and Operating Height.
7. Take no more than two additional counter-clockwise turns on any "M" adjusting bolt to level equipment.
8. Tighten cap screws "L" to secure equipment.
9. Turn rebound plate clockwise to lower or counter-clockwise to raise. Adjust plate so there is 1/8"(3mm) clearance between top of plate and underside of all directional neoprene cushion.

### SPECIFICATION

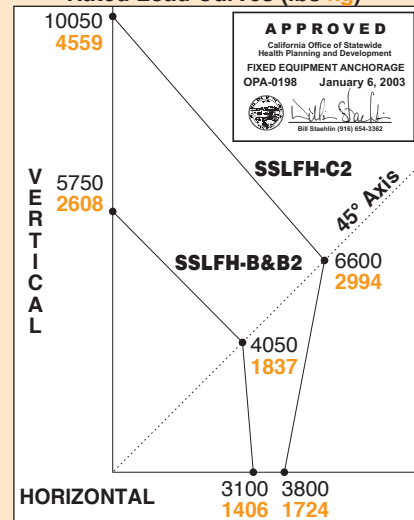
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### OSHPD OPA-0198

#### Rated Load Curves (lbs kg)<sup>†</sup>



<sup>†</sup> For Kn divide Kg by 102.

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- 2) Plot Horizontal Load vs Vertical Load. The point must fall within the area below the OSHPD curve.