

ADAM Sp. z o.o.

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SSLFH

TYPE

DATA SHEET DS-203-6.2

1"(25mm) Deflection Spring Series "L" DIA CAPSCREW to fasten equipment M" DIA ADJUSTING BOLT FREE DOWN STOP OP. HT. LDIRECTIONAL 2 NEOPRENE CUSHION REBOUND UPWARD REBOUND PLATE IS PLATE ADJUST adjustable to control clearance MENT DUCTILE IRON HOUSING INTERCHANGEABLE STEEL SPRING NEOPRENE SPRING ACOUSTICAL CUP INSPECTION Alternate-"K" DIA - 4 Holes 'J" DIA - 2 Holes Countersunk to allow for plug welding or bolling

TYPE SSLFH DIMENSIONS (inches mm)

Size	Α	В	С	D	Ε	F	J	К	L	М	Free & Op Ht
SSLFH-A	1/4	4	6 ¹ / ₄	43/4	4	1 ¹ /8	3/4	1/2	3/8	3/4	6
SSLFH-B	1/2	6	9 ¹ / ₄	71/2	51/2	15/8	3/4	5/8	1/2	7/8	71/2
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

PLUG WELDED RATINGS

Size	Horizontal (lbs) (kg)	Vertical (lbs) (kg)
SSLFH-A SSLFH-B SSLFH-C	3100 1406	5500 2495 4345 1971 5630 2554

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.

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" (dmm) 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.



TYPICAL PLUG WELD

Plug Welded Testing and Calculations were performed to meet OSHPD criteria.

- 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.

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	Capacity (lbs) (kg)	Defl (in) (mm)	Constant (fbs/in)(kg/mm	Color/ G Stripe Rating
SSLFH-A-45 SSLFH-A-75	45 20 75 34	1.60 41 1.50 38	28 0.5 50 0.9	Blue 37.8 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		Yellow 5.5
SSLFH-A-400 SSLFH-A-510	400 181 510 231	1.00 25	400 7.2 510 9.2	Green 4.3 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		Green 11.1
SSLFH-B-450		1.31 33	344 6.2	Red 6.9
SSLFH-B-750 SSLFH-B-1000		1.12 28	670 12.1 1000 18.2	White 4.1 Blue 3.1
	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 SSLFH-C-2385	2100 953 2385 1082	1.00 25	2100 38.1 2385 43.3	Yellow** 1.8 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

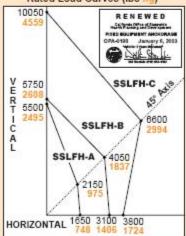
with Black stripe *with Red inner spring **with Green inner spring

SPRING DATA

2000	Spring OD	Free	Ht.	Ratio	Ratio
Size	(in)(mm)	(in)	(mm)	Kx/Ky	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
В	23/8 60	4	102	0.65-0.90	0.76-1.25
С	27/8 73	41/8	105	0.90-1.00	0.92

OSHPD OPA-0198

Rated Load Curves (lbs kg)†



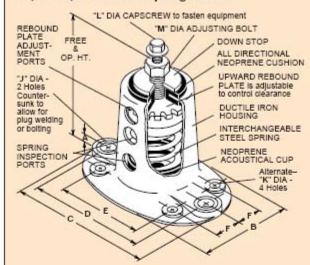
*For Kn divide Kg by 102.

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. 2) 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	Rated	Mount	Spring	Max.
	Capacity	Defi	Constant	Color/	G
	(ibs) (kg)	(in)(mm)	(lbsin)(kg/mm)	Stripe	Rating
SSLFH-B-20	20 9	2.40 61	8 0.1	Tan	155.0
SSLFH-B-26	26 12	2.18 55	12 0.2	White/Blue	119.2
SSLFH-B-35	35 16	2.20 56	16 0.3	Purple	88.6
SSLFH-B-50	50 23	2.20 56	24 0.4	White/Red	62.0
SSLFH-B-65	65 30	2.10 53	31 0.6	Brown	47.7
SSLFH-B-85	85 39	2.10 53	40 0.7	White/Black	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-B2-210	210 95	2.12 54	99 1.8	Silver	14.8
SSLFH-B2-290	290 131	2.00 51	144 2.6	Blue	10.7
SSLFH-B2-450* SSLFH-B2-680* SSLFH-C2-125 SSLFH-C2-170	450 204 680 308 125 57 170 77	2.00 51 2.00 51 2.50 64 2.40 61	224 4.0 340 6.0 50 0.9	Tan Gray Purple	6.9 4.6 30.4 22.4
SSLFH-C2-210 SSLFH-C2-260 SSLFH-C2-330 SSLFH-C2-460	210 95 260 118 330 150 460 209	2.30 58 2.20 56 2.00 51 2.00 51	70 1.3 90 1.6 120 2.1 165 2.9 230 4.1	Brown Red White Black Blue	18.1 14.6 11.5 8.3
SSLFH-C2-810	610 277	2.00 51	305 5.4	Green	6.2
SSLFH-C2-880 [‡]	880 399	2.00 51	440 7.8	Gray	4.3
SSLFH-C2-1210 [‡]	1210 549	2.00 51	605 10.8	Silver	3.1
SSLFH-C2-1540 [‡]	1540 699	2.00 51	770 13.7	Gray*	2.5
SSLFH-C2-1870 [‡]	1870 848	2.00 51	935 16.6	Silver*	2.0

*with RED inner spring

TYPE SSLFH DIMENSIONS (inches mm)

Size	Α	В	С	D	E	F	J	к	Ĺ		Free & Op Ht
SSLFH-B&B2 SSLFH-C2	1/2		91/4 11	71/2 9	51/2 6	15/8 2		5/8 3/4			71/2 8
SSLFH-B&B2 SSLFH-C2			235 279	191 229		41 51		16 19	13 16	22 25	191 203

¹Published ratings allow minimum 25% additional travel to solid. For a full 50% specified minimum use the following ratings:

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

PLUG WELDED RATINGS

Size	Horizontal (lbs) (kg)	Vertical (lbs) (kg)
SSLFH-B SSLFH-C	3100 1406	4345 1971
SSLFH-C	3800 1724	5630 2554



Plug Welded Testing and Calculations were performed to meet OSHPD criteria.

SPRING DATA

Size	Spring OD	Free Ht.	Ratio	Ratio
	(in)(mm)	(in) (mm)	Kx/Ky	OD/OH
B & B2	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

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.
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- 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" (8mm) 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.

OSHPD OPA-0198



[†] For Kn divide Kg by 102.

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To use approved OSHPD rated load curves:

 Calculate Vertical and Horizontal Forces on mountings including translations and overturning moments. 2) Plot Horizontal Load vs Vertical Load. The point must fall within the area below the OSHPD curve.