

WIRE ROPE

ISOLATORS



SHOCK & VIBE, INC.
SUPPORT@SHOCKANDVIBRATIONS.COM
WWW.SHOCKANDVIBRATIONS.COM
631 209-5354 (P) | 631-857-7844 (F)

**IMPERIAL
CATALOG # SV620**

WIRE ROPE ISOLATORS



Wire Rope Isolators have earned their reputation as a resilient spring with simultaneous isolation on three axes. Robust in its design with stainless steel helix cable and iridited aluminum retaining bars, they are the preferred isolator to attenuate both shock and vibration.

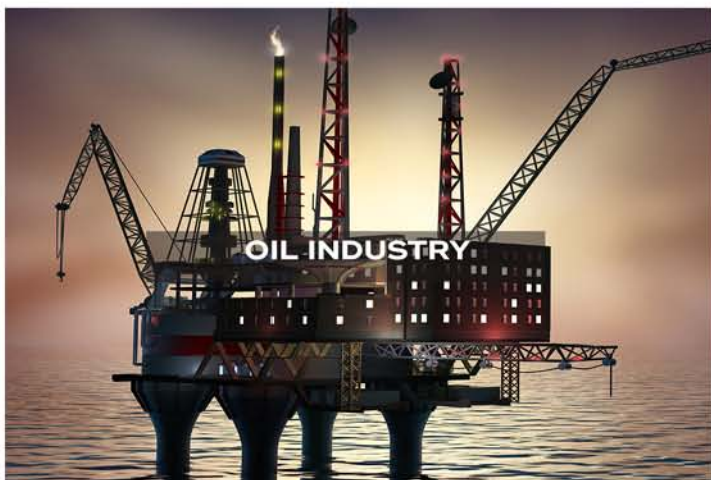
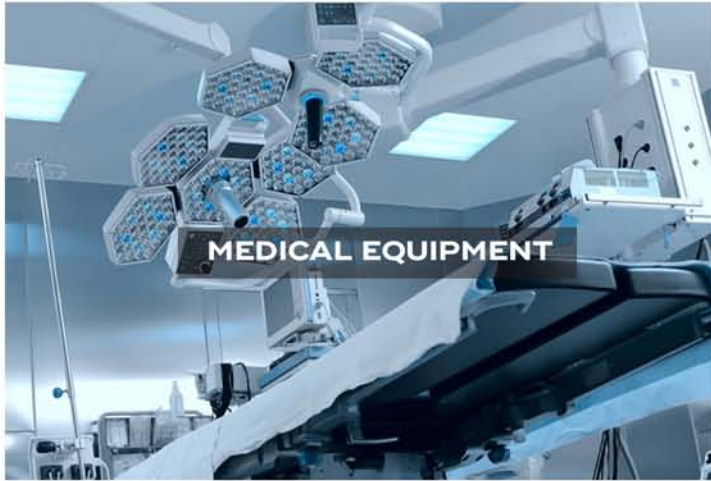
Other features include:

- Corrosive resistance in extreme environment
- Wide range of operating temperature
- Compression, shear, and 45 degree mounting
- Maintenance free with long lifespan
- Large selection from 1/16" to 7/8" wire diameter

These are suitable for such applications as Industrial Equipment, Medical Devices, Oil Industry, Electronic Enclosures, Mobile Satellites, and Military Vehicles, Shipboard & Avionics.



MARKETS

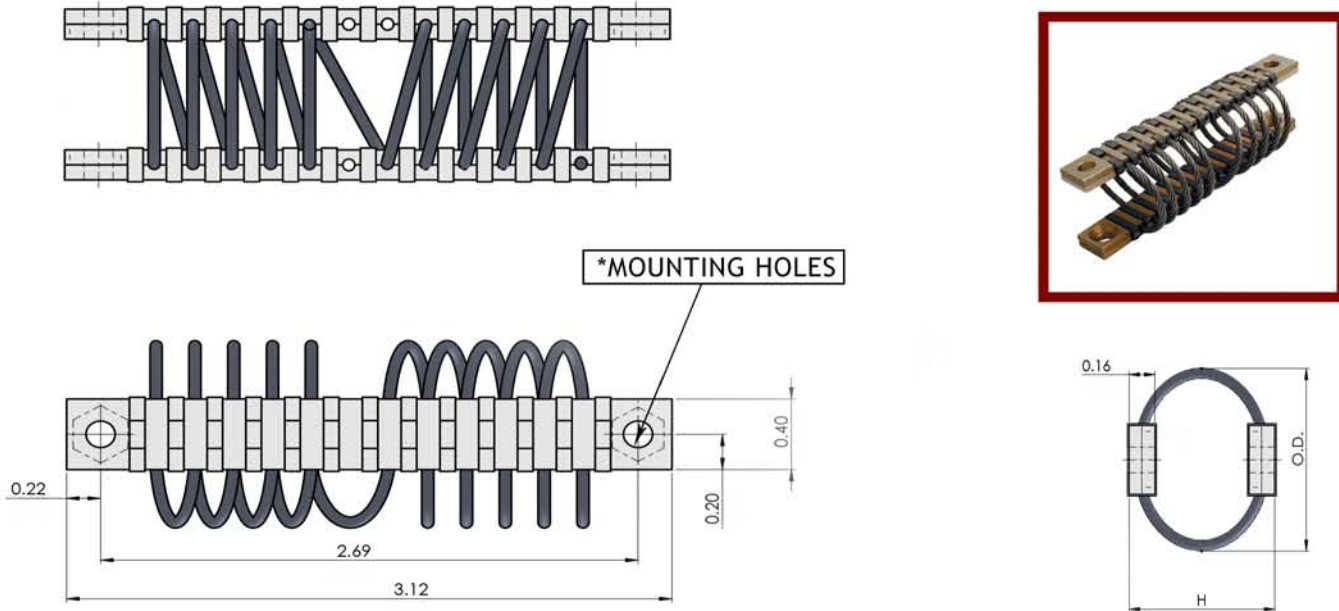




WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
- SHOCK AND VIBRATION PROTECTION
- MAINTENANCE-FREE

SV062 SERIES 1/16" CABLE DIA



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING CLIPS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV062-01-A	1/16"	0.7	1.0	99	0.3	69	0.3	37	0.6
SV062-02-A		0.8	1.1	65	0.4	54	0.4	23	0.7
SV062-03-A		1.0	1.2	36	0.5	48	0.6	11	0.8
SV062-04-A		1.1	1.3	25	0.6	32	0.7	8	0.9
SV062-05-A		1.2	1.4	18	0.7	24	0.8	5	1.0
SV062-06-A		1.3	1.5	14	0.8	21	0.9	4	1.1

* SHOWN WITH #8-32 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

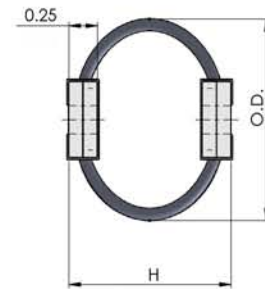
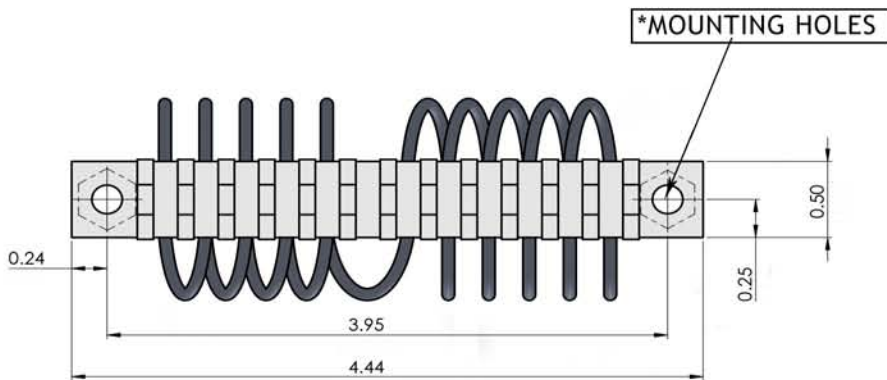
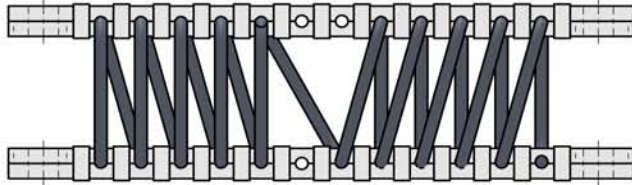
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WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
- SHOCK AND VIBRATION PROTECTION
- MAINTENANCE-FREE

SV093 SERIES 3/32" CABLE DIA



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING CLIPS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV093-01-A	3/32"	0.9	1.1	377	0.2	177	0.3	82	0.5
SV093-02-A		1.0	1.2	233	0.3	136	0.4	75	0.6
SV093-03-A		1.1	1.3	146	0.4	84	0.5	49	0.7
SV093-04-A		1.3	1.5	85	0.5	51	0.6	24	1.1
SV093-05-A		1.4	1.6	61	0.6	38	0.7	17	1.2
SV093-06-A		1.5	1.7	48	0.7	32	0.8	14	1.3

* SHOWN WITH #10-32 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

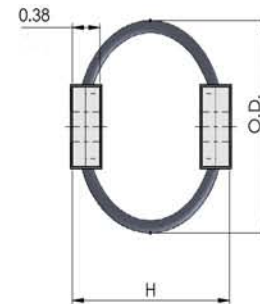
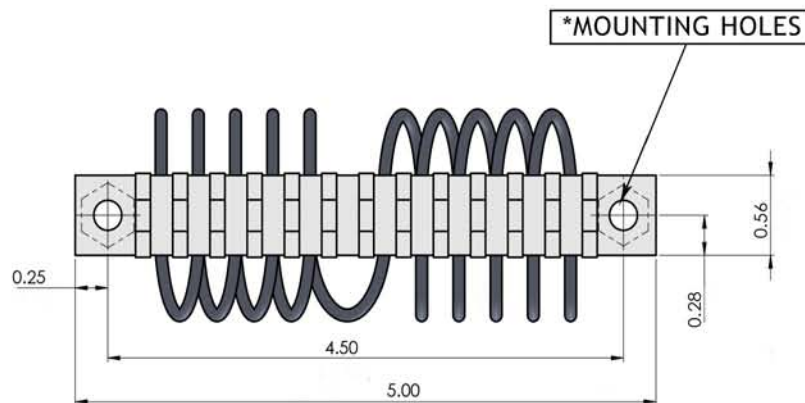
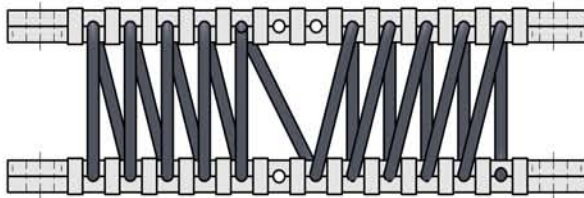
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WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
- SHOCK AND VIBRATION PROTECTION
- MAINTENANCE-FREE

SV125 SERIES 1/8" CABLE DIA



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING CLIPS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV125-01-A	1/8"	1.1	1.4	696	2.0	335	0.4	162	0.9
SV125-02-A		1.2	1.5	450	0.4	268	0.5	130	1.0
SV125-03-A		1.3	1.6	290	0.5	181	0.6	98	1.1
SV125-04-A		1.4	1.7	215	0.6	146	0.7	75	0.2
SV125-05-A		1.5	1.8	170	0.7	129	0.8	56	0.3
SV125-06-A		1.6	1.9	135	0.8	125	0.9	44	1.5
SV125-07-A		1.8	2.1	82	1.0	75	1.1	28	1.7
SV125-08-A		2.0	2.3	61	1.20	67	1.3	20	1.9

* SHOWN WITH 1/4-28 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

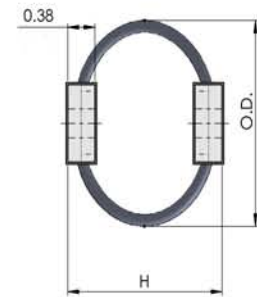
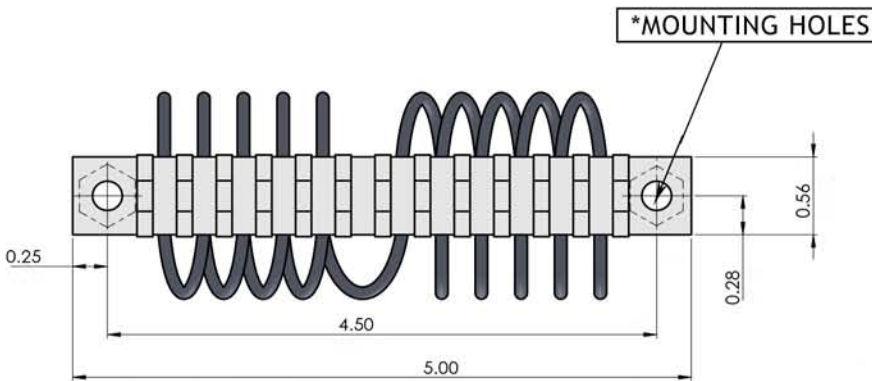
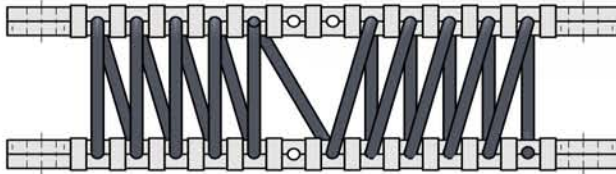
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WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
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- MAINTENANCE-FREE

SV156 SERIES 5/32" CABLE DIA



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING CLIPS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV156-01-A	5/32"	1.20	1.60	767	0.4	377.0	0.5	264.0	0.7
SV156-02-A		1.30	1.70	543	0.5	295.0	0.6	179.0	0.8
SV156-03-A		1.50	1.90	329	0.7	210.0	0.8	114.0	1.1
SV156-04-A		1.80	2.10	196	0.9	149.0	1.1	67.0	1.4
SV156-05-A		2.00	2.30	133	1.0	131.0	1.3	45.0	1.6
SV156-06-A		2.20	2.50	97	1.2	86.0	1.5	30.0	1.8

* SHOWN WITH 1/4-20 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

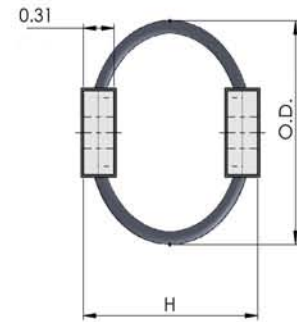
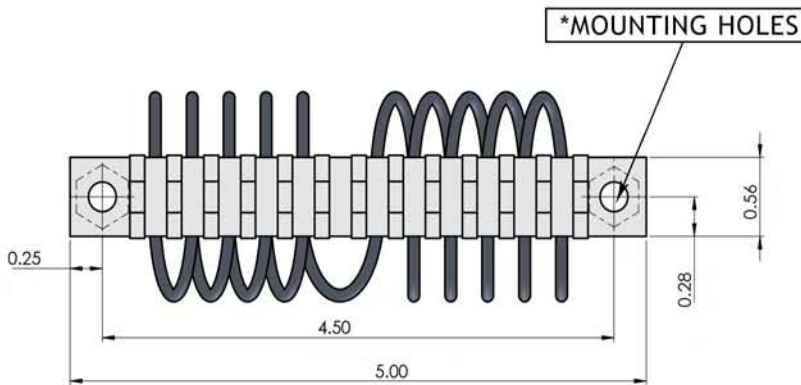
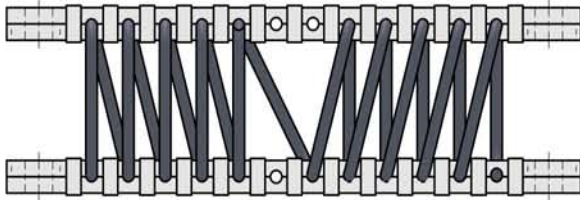
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WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
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- MAINTENANCE-FREE

SV187 SERIES 3/16" CABLE DIA



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING CLIPS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV187-01-A	3/16"	1.20	1.40	1891	0.3	913	0.4	845.0	0.4
SV187-02-A		1.30	1.50	1534	0.3	710	0.4	537.0	0.6
SV187-03-A		1.40	1.60	1149	0.4	558	0.5	414.0	0.7
SV187-04-A		1.50	1.70	811	0.5	433	0.5	280.0	0.9
SV187-05-A		1.60	1.80	612	0.7	340	0.5	231.0	0.9
SV187-06-A		1.70	1.90	492	0.8	263	0.6	204.0	1.0

*SHOWN WITH 1/4-28 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES .

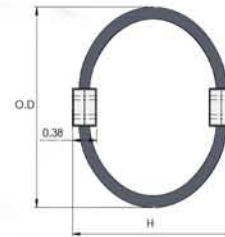
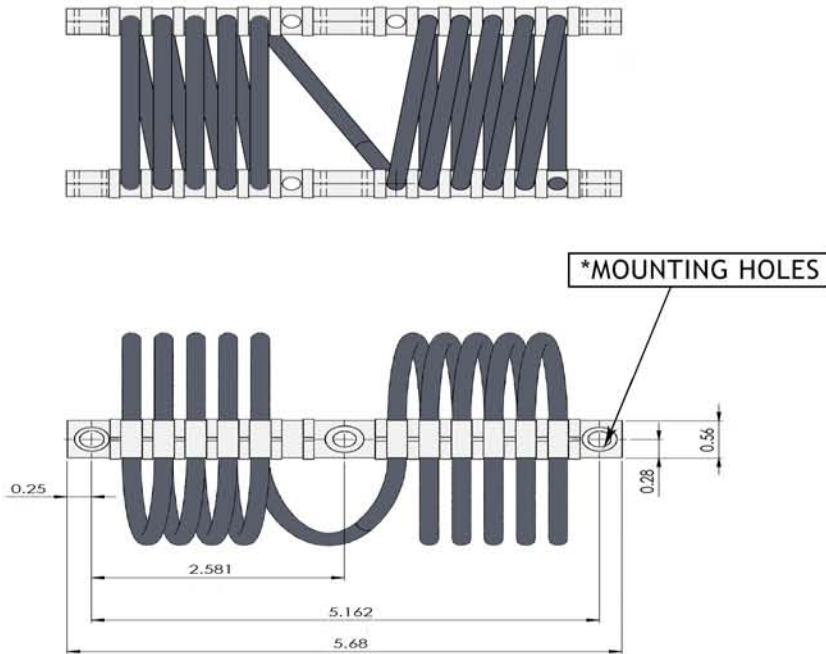
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SV187 SERIES 3/16" CABLE DIA



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING CLIPS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV187-07-A	3/16"	2.00	2.28	279	1.0	159	0.8	94	1.9
SV187-08-A		2.06	2.50	227	1.1	131	1.1	72	2.2
SV187-09-A		2.13	2.94	155	1.1	95	1.3	57	2.5
SV187-10-A		2.19	3.19	129	1.2	77	1.8	54	2.7
SV187-11-A		2.45	3.45	82	1.4	58	1.9	36	2.8
SV187-12-A		3.20	4.20	39	2.0	31	2.0	18	3.2

* SHOWN WITH 1/4-20 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

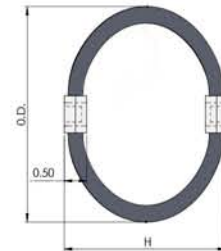
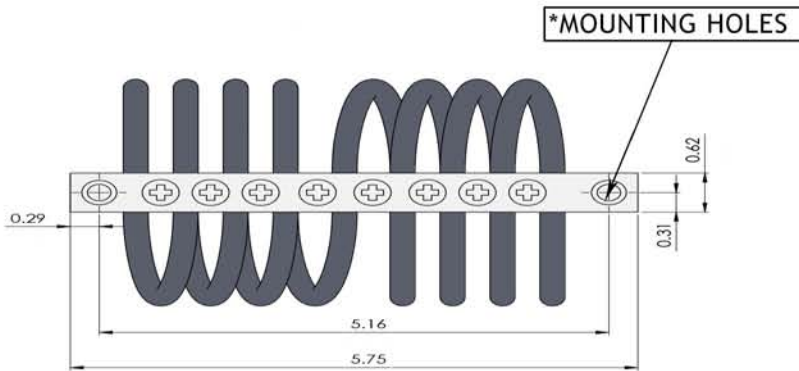
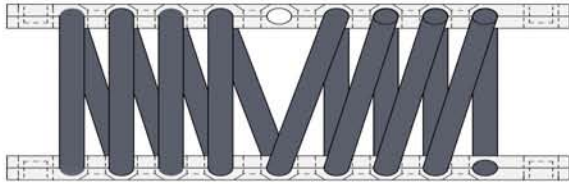
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WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
- SHOCK AND VIBRATION PROTECTION
- MAINTENANCE-FREE

SV250 SERIES 1/4" CABLE DIA



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING SCREWS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV250-01-A	1/4"	1.90	2.20	1033	0.6	516.0	0.8	300.0	1.5
SV250-02-A		2.13	2.50	623	0.8	323.0	1.0	182.0	1.8
SV250-03-A		2.31	2.80	423	1.0	277.0	1.3	122.0	2.2
SV250-04-A		2.50	3.13	304	1.1	192.0	1.6	96.0	2.3
SV250-05-A		2.50	3.50	234	1.3	174.0	1.7	92.0	2.5
SV250-06-A		2.63	3.75	181	1.5	124.0	1.9	76.0	2.7
SV250-07-A		2.63	3.95	159	1.5	110.0	2.0	75.0	2.8
SV250-08-A		3.25	4.25	100	2.0	67.0	2.2	39.0	3.0

* SHOWN WITH 1/4-28 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

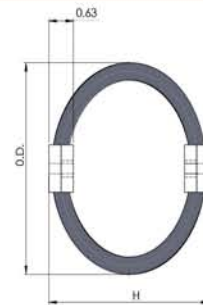
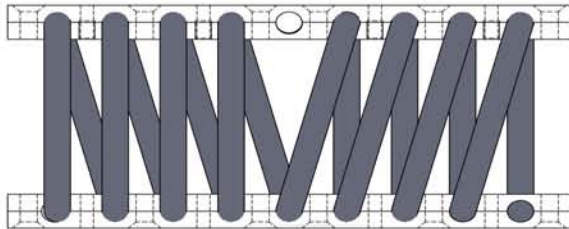
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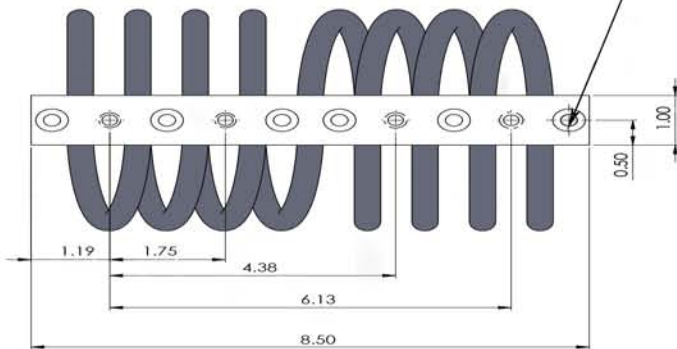
WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
- SHOCK AND VIBRATION PROTECTION
- MAINTENANCE-FREE

SV375 SERIES 3/8" CABLE DIA



*MOUNTING HOLES



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING SCREWS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV375-01-A	3/8"	2.80	3.31	1099	1.0	638.0	1.0	662.0	1.5
SV375-02-A		2.90	3.50	1017	1.1	454.0	1.1	442.0	2.0
SV375-03-A		3.00	4.13	734	1.3	385.0	1.5	357.0	2.3
SV375-04-A		3.25	4.25	598	1.5	313.0	1.6	212.0	2.8
SV375-05-A		3.50	4.50	447	1.7	236.0	1.7	167.0	3.5
SV375-06-A		4.13	4.75	319	2.0	179.0	2.0	100.0	4.0
SV375-07-A		4.25	5.50	228	2.2	135.0	2.2	89.0	4.5

* SHOWN WITH 1/4-28 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

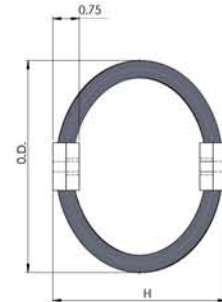
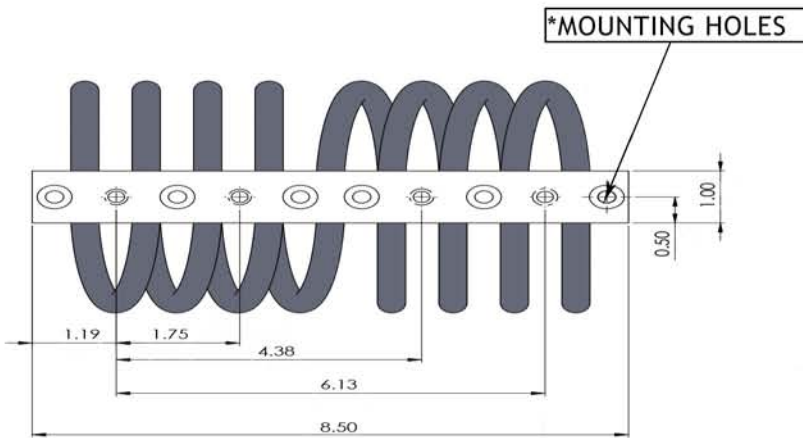
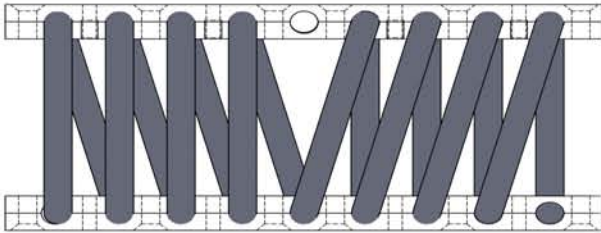
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WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
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- MAINTENANCE-FREE

SV500 SERIES 1/2" CABLE DIA



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING SCREWS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV500-01-A	1/2"	3.25	4.00	1730	1.5	795.0	1.2	705.0	2.5
SV500-02-A		3.50	4.13	1492	1.6	674.0	1.3	604.0	2.7
SV500-03-A		3.75	4.75	1159	1.7	507.0	1.5	409.0	3.2
SV500-04-A		4.25	5.25	718	2.3	357.0	1.8	280.0	3.5
SV500-05-A		4.90	5.65	469	2.8	243.0	2.3	180.0	4.0
SV500-06-A		5.40	6.13	339	3.5	209.0	2.6	134.0	4.5
SV500-07-A		6.10	7.10	229	4.1	120.0	3.0	87.0	5.2

* SHOWN WITH 1/4-28 THREADED INSERTS BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

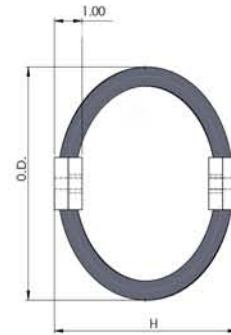
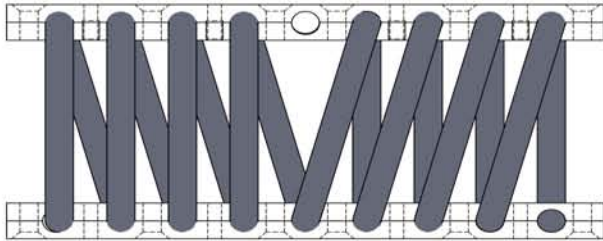
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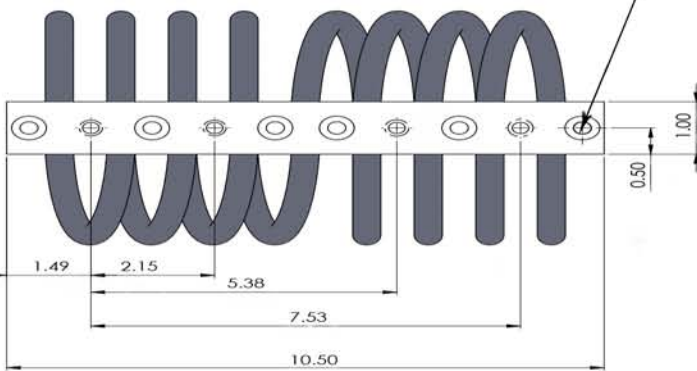
WIRE ROPE ISOLATORS

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- MAINTENANCE-FREE

SV625 SERIES 5/8" CABLE DIA



*MOUNTING HOLES



MATERIAL SPECIFICATION:

CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING SCREWS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV625-01-A	5/8"	3.50	4.00	3721	1.2	1602.0	1.2	1950.0	1.8
SV625-02-A		3.90	4.40	2789	1.4	1258.0	1.4	1533.0	2.3
SV625-03-A		4.30	5.30	1774	1.8	821.0	1.8	888.0	2.8
SV625-04-A		4.70	6.00	1199	2.2	641.0	2.2	549.0	3.2
SV625-05-A		5.00	6.50	974	2.5	523.0	2.5	462.0	3.6

* SHOWN WITH 3/8-24 TAPPED HOLES BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

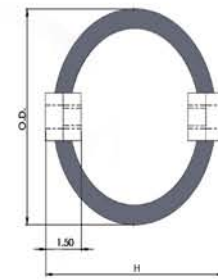
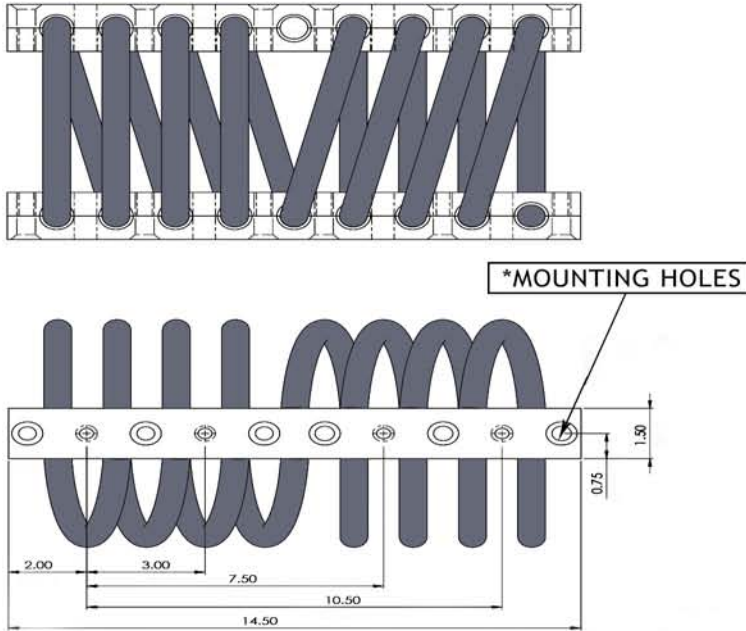
CONTACT OUR ENGINEERING DEPARTMENT FOR SIZING AND PRICING AT
 SUPPORT@SHOCKANDVIBRATIONS.COM, 631-209-5354 (P), OR 631-857-7844 (F)



WIRE ROPE ISOLATORS

- MULTI-AXIS ISOLATION
- SHOCK AND VIBRATION PROTECTION
- MAINTENANCE-FREE

SV875 SERIES 7/8" CABLE DIA



MATERIAL SPECIFICATION:

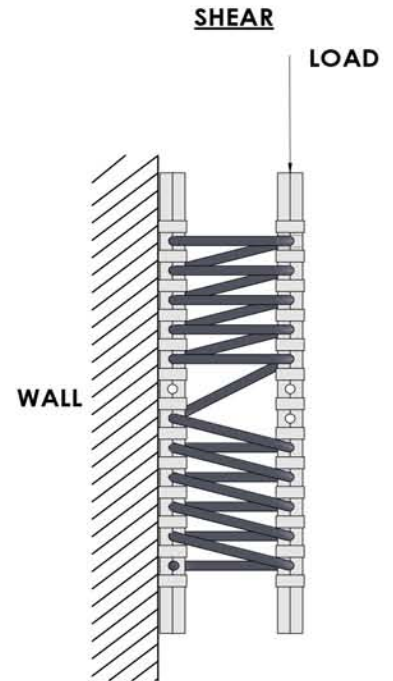
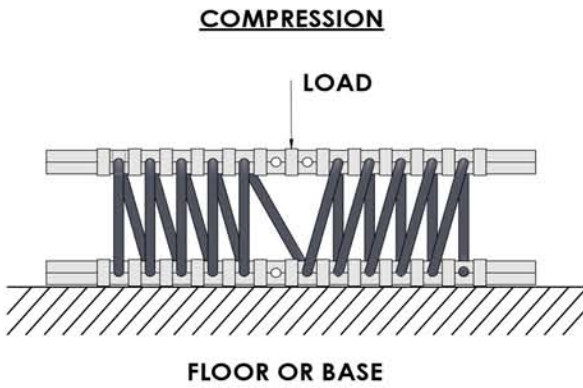
CABLE WIRE: STAINLESS STEEL (MIL-W-83420)
 RETAINING BARS: ALUMINUM ALLOY 6061-T6; IRIDITED (MIL-C-5541)
 RETAINING SCREWS: STAINLESS STEEL

MODEL	DIMENSIONS			COMPRESSION		SHEAR & ROLL		45° COMPRESSION / ROLL	
	WIRE DIA IN	H IN	OD IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN	SPRING RATE LB/IN	MAX DEFL IN
SV875-01-A	7/8"	5.25	5.50	4375	2.0	2865	2.1	2820	2.5
SV875-02-A		6.00	6.50	2782	2.6	1541	2.6	1441	3.2
SV875-03-A		6.25	7.00	1956	3.0	1419	2.9	1271	3.8
SV875-04-A		7.50	8.25	1277	3.6	809	3.3	770	4.7
SV875-05-A		8.50	9.25	842	4.2	493	4.0	388.0	6.4

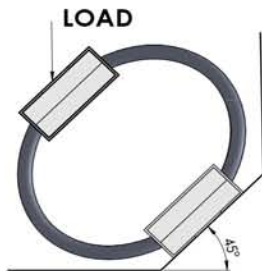
* SHOWN WITH 1/2-13 TAPPED HOLES BOTH BARS; REPLACE -A WITH -C FOR CSK HOLES

CONTACT OUR ENGINEERING DEPARTMENT FOR SIZING AND PRICING AT
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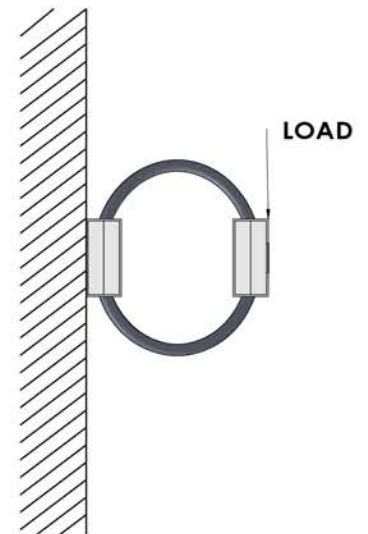
MOUNTING ORIENTATION



45° COMPRESSION / ROLL



ROLL





SELECTION GUIDE

1. DATE: _____
2. COMPANY NAME: _____
3. CONTACT PERSON: _____
 - a). NAME: _____
 - b). EMAIL: _____
 - c). PHONE: _____

PROJECT INFORMATION

4. PROJECT NAME: _____
5. PROJECT START DATE: _____
6. DESIGN PHASE PROTOTYPE PRE- PRODUCTION PRODUCTION ONE OFF

TECHNICAL REQUIREMENTS

7. EQUIPMENT DATA:
 - a). WEIGHT: _____
 - b). DIMENSIONS: D ___ W ___ H ___
 - c). C.G. LOCATION: D ___ W ___ H ___
 - d). # OF MOUNTS: _____
 - e). MOUNT LOCATION: PROVIDE SKETCH
 - f). MAX MOUNT SIZE : D ___ W ___ H ___
8. ORIENTATION OF MOUNTS:
COMPRESSION SHEAR 45 DEG OTHER: _____
9. SHOCK REQUIREMENTS:
 - a). SHOCK INPUT/ DURATION: _____
 - b). EQUIPMENT FRAGILITY: _____
 - c). DROP HEIGHT: _____
10. VIBRATION REQUIREMENTS:
 - a). SOURCE OF VIBRATION: _____
 - b). FORCING FREQUENCY (LOWEST SPEED IN RPM/60): _____
 - c). DESIRED SYSTEM NATURAL FREQUENCY (HZ): _____
11. MIL SPECIFICATION REQUIREMENTS: _____



SUPPORTING & ISOLATING THE WORLD!

SHOCK & VIBE, INC.

SUPPORT@SHOCKANDVIBRATION.COM
WWW.SHOCKANDVIBRATIONS.COM
631-209-5354 (P) | 631-857-7844 (F)