



Custom Engineered Solutions

Shock, Noise and Vibration





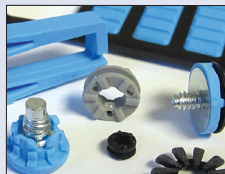
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ELASTOMERS

ISODAMP™ C-8000 MATERIALS

- Highly damped thermo-plastic molded products for noise, shock and vibration control
- RoHS 3 compliant
- JIG-101 compliant
- Halogen-free*
- Available in durometers from 40 to 88 Type A
- Listed UL 94 V-0 flame rating



ISOLOSS™ SL MATERIALS

- Highly damped thermoset molded products for noise, shock and vibration control
- RoHS 3 compliant
- JIG-101 compliant
- Halogen-free*
- Available in durometers from 20 to 60 Type A
- Available in listed UL 94 and non-listed formulations



FOAMS

CONFOR™ EG FOAMS

- Highly compliant shock and energy absorbing, strain-rate sensitive, open-cell foam products
- Listed UL 94 HF-1 flame rating
- RoHS 3 compliant
- JIG-101 compliant
- Halogen-free*
- Available in a range of stiffnesses and parts



CONFOR™ SC FOAMS

- Small cell, slow-recovery foam that can be easily compressed up to 95% for shock protection and gasketing in tight spaces.
- Low compression set
- Highly conformable gap filler
- Listed HF-1 @ 0.5mm-3.0mm
- RoHS 3 Compliant
- JIG-101 Compliant
- Halogen-free*



*Per IEC 61249-2-21

ISODAMP™ C-8000 Molding Materials

ISODAMP™ elastomers provide high-performance shock, vibration, and noise control. These highly damped materials exhibit extremely low rebound characteristics, ensuring very low amplification at resonance and rapid settling to equilibrium after shock or vibration input. Standard configurations include isolation grommets (with or without metal inserts), bushings & rings, fan mounts, and more.

ISODAMP™ C-8000 Series elastomers are halogen-free for use in electronic devices and have a loss factor up to ~1.3. Multiple Type A durometers are available.

Typical Properties

Property	C-8012	C-8002	C-8070	C-8130
Description	TPE Solid Thermoplastic	TPE Solid Thermoplastic	TPE Solid Thermoplastic	TPE Solid Thermoplastic
Hardness ASTM D2240 Type A Durometer 23C (73F) 15 sec impact	40	51	70	88
Compression Load Deflection kPa (psi) ASTM D575 at 0.51 cm/min (0.2 in/min)				
10% kPa (psi)	324 (47)	455 (66)	951 (138)	3619 (525)
20% kPa (psi)	627 (91)	883 (128)	1799 (261)	6494 (942)
30% kPa (psi)	958 (139)	1358 (197)	2799 (406)	9087 (1318)
Compression Set (%) ASTM D395 Method B 22 hr at 22C (72F) 22 hr at 70C (158F)	12 100	15 99	15 98	35 90
Tensile Strength kPa (psi) ASTM D412	3309 (480)	5309 (770)	10059 (1459)	11279 (1636)
Tear Strength kN/m (lbf/in) ASTM D624	18 (100)	25 (141)	50 (285)	72 (410)
Temperature Range Peak Damping Performance Temperature Range C				
@ 10 Hz	-26 to 22	-6 to 37	4 to 42	5 to 27
@ 100 Hz	-19 to 35	-2 to 50	8 to 53	10 to 34
@ 1000 Hz	-13 to 55	4 to 71	14 to 68	16 to 41

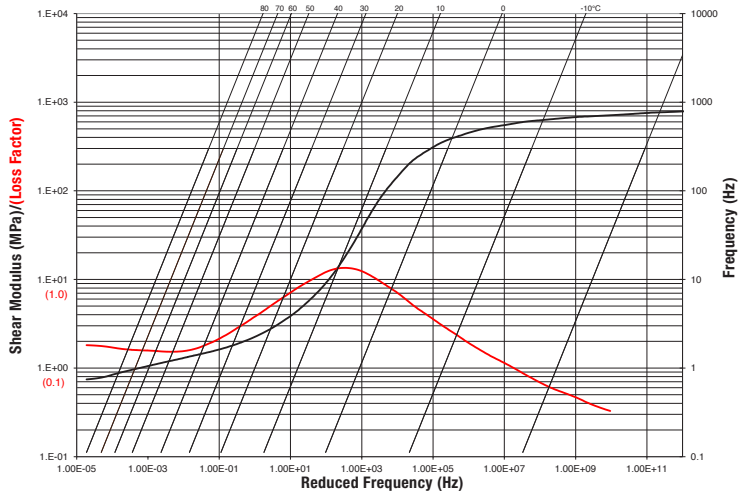
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Environmental Properties

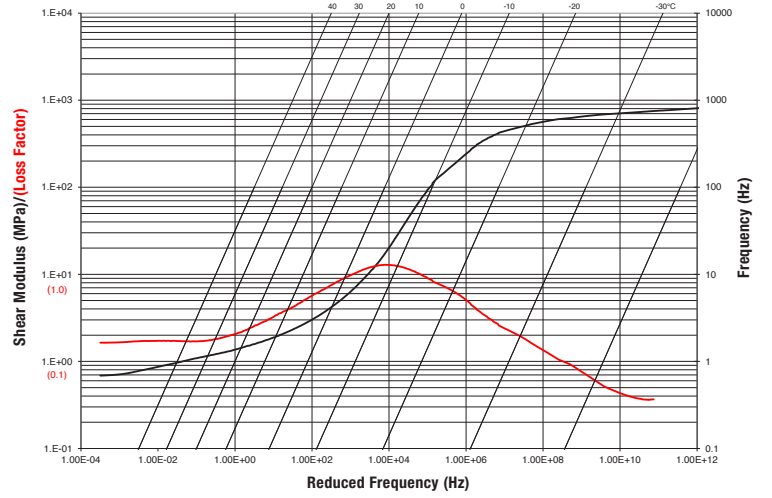
Property	C-8012	C-8002	C-8070	C-8130
Flammability UL 94 mm (in)	Listed V-0 @ 6 (0.24)	Listed V-0 @ 3.4 (0.13)	Listed V-0 @ 3.0	Listed V-0 @ 3.5 (0.14)
RoHS 3 Compliant	Yes	Yes	Yes	Yes
Halogen-free*	Yes	Yes	Yes	Yes

Halogen-free per IEC 61249-2-21.

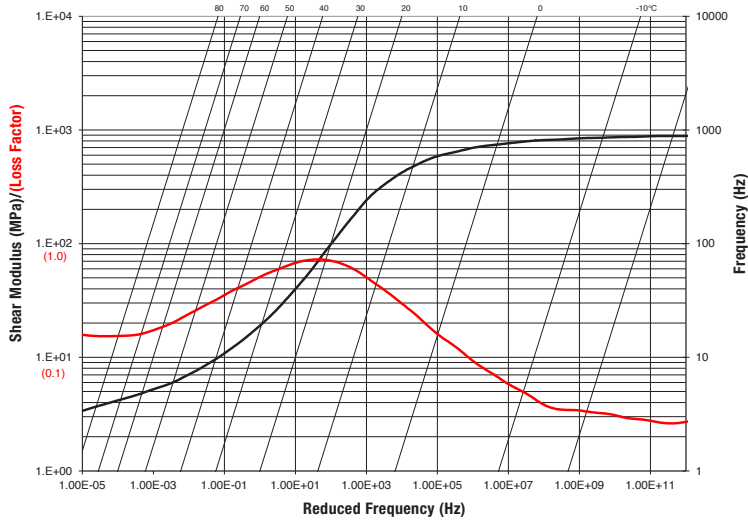
ISODAMP C-8002



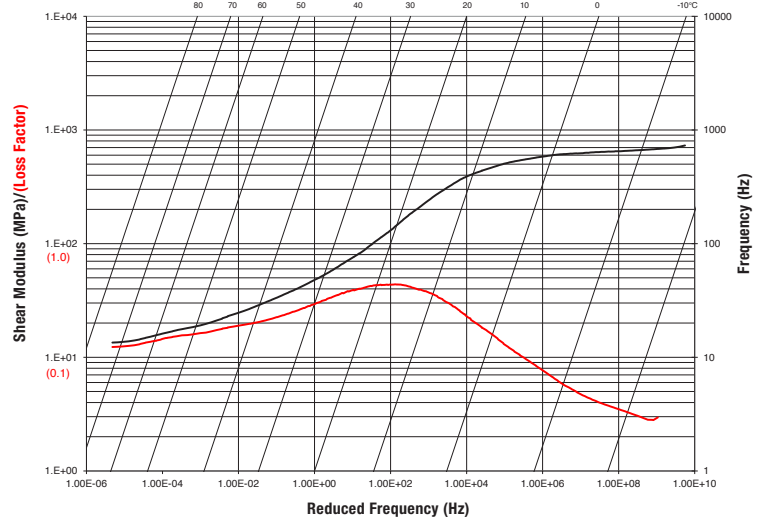
ISODAMP C-8012



ISODAMP C-8070



ISODAMP C-8130



ISOLOSS™ SL Molding Materials

ISOLOSS elastomers are highly damped, low modulus, thermoset compounds with exceptional molding stability. The material exhibits high internal damping, excellent resistance to creep and compression and can be metal-bonded during molding.

ISOLOSS™ SL Series are Aearo's highest damped elastomers, capable of loss factors above 2. Multiple Type A durometers are available.

Typical Properties

Property	SL-20300	SL-35300	SL-50300	SL-60300
Description	Synthetic Rubber	Synthetic Rubber	Synthetic Rubber	Synthetic Rubber
Hardness ASTM D2240 Type A Durometer 23C (73F) 15 sec impact	19	30	45	56
Compression Load Deflection kPa (psi) ASTM D575 at 0.51 cm/min (0.2 in/min)				
10% kPa (psi)	117 (17)	193 (28)	338 (49)	517 (68)
20% kPa (psi)	221 (32)	379 (55)	669 (97)	1013 (132)
30% kPa (psi)	352 (51)	607 (88)	1096 (159)	1689 (222)
Compression Set (%) ASTM D395 Method B 22 hr at 22C (72F) 22 hr at 70C (158F)	3 7	4 6	2 7	3 4
Tensile Strength kPa (psi) ASTM D412	4185 (600)	5667 (822)	10149 (1472)	10721 (1555)
Tear Strength kN/m (lbf/in) ASTM D624	11.4 (65)	20.1 (115)	18.9 (108)	24.15 (138)
Temperature Range Peak Damping Performance Temperature Range C				
@ 10 Hz	-23 to 29	-21 to 30	-5 to 42	-10 to 35
@ 100 Hz	-18 to 47	-16 to 47	-2 to 63	-4 to 47
@ 1000 Hz	-14 to 71	-12 to 72	4 to 82	1 to 60

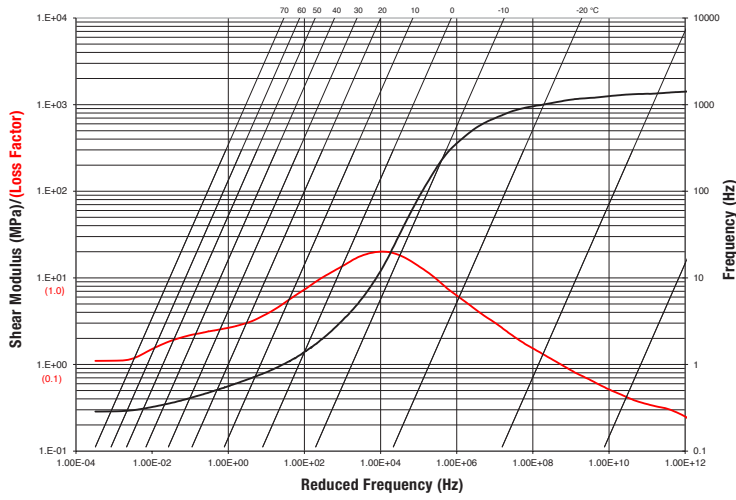
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Environmental Properties

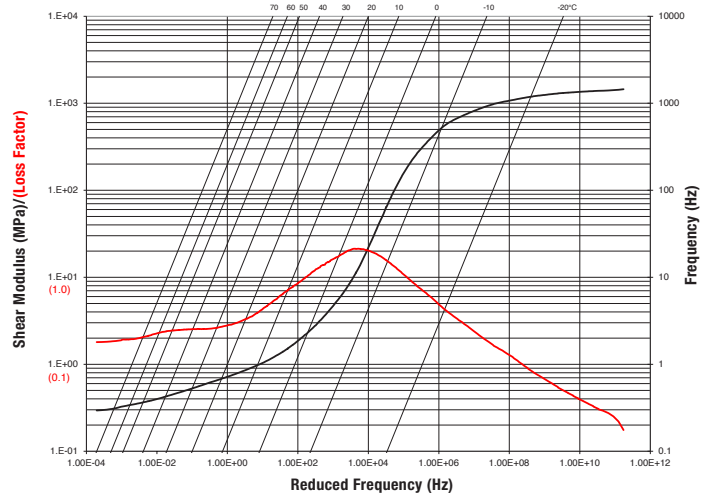
Property	SL-20300	SL-35300	SL-50300	SL-60300
Flammability UL 94 mm	Listed HB @ 2.3-2.5	Listed HB @ 3.5	Listed HB @ 1.5	Listed HB @ 1.5
RoHS 3 Compliant	Yes	Yes	Yes	Yes
Halogen-free*	Yes	Yes	Yes	Yes

*Halogen-free per IEC 61249-2-21.

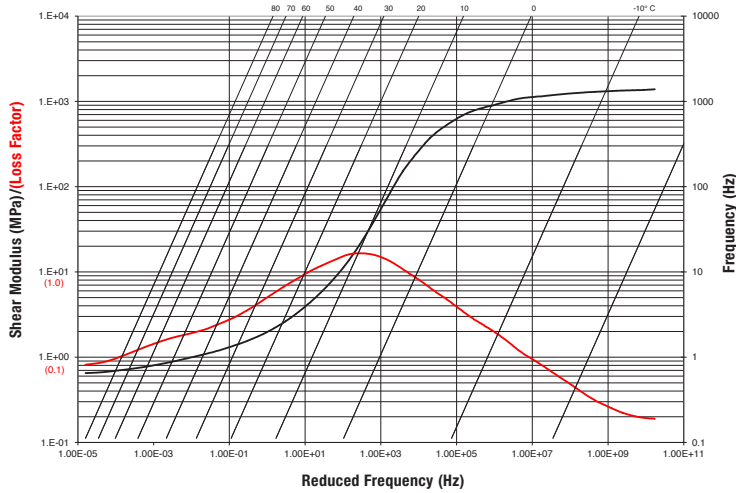
ISOLOSS SL-20300



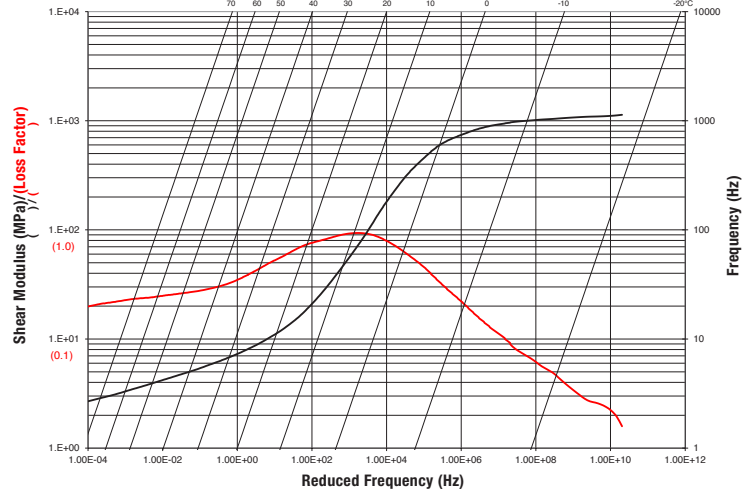
ISOLOSS SL-35300



ISOLOSS SL-50300



ISOLOSS SL-60300



CONFOR™ polyurethane foams offer a unique combination of physical characteristics, high-energy absorption properties, and temperature-softening behavior. The foams exhibit no silicone off-gassing and exert low force under high compression, making them ideal for shock protection and gasketing in electronics applications. Soft and flexible, the highly damped, slow-recovery materials contain no halogens or metal compounds.

CONFOR™ EG (Electronics Grade) Series foams are available in thicknesses of 1.5mm and greater for use in thin gap spaces or as thicker cushioning or comfort material. Multiple Type 000 durometers are available, from soft to firm.

Typical Properties

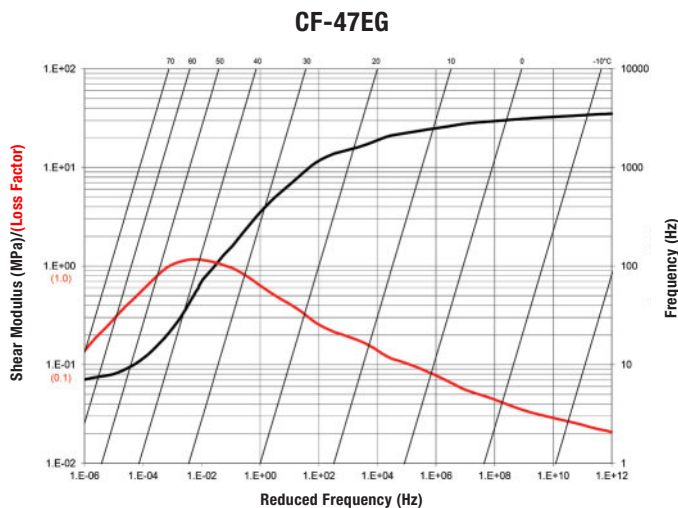
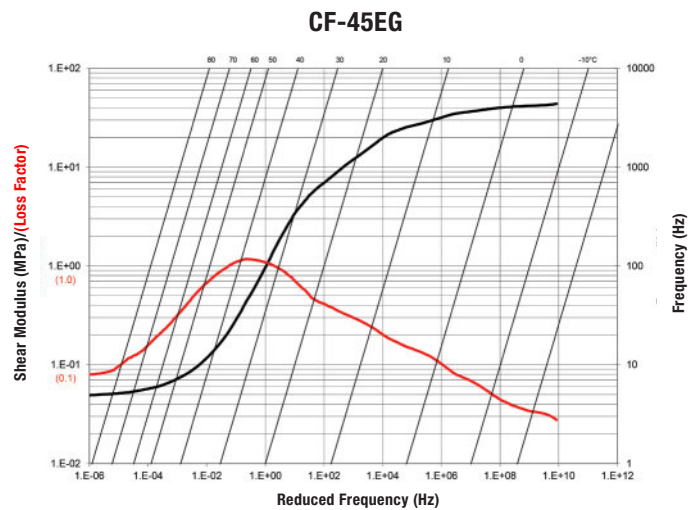
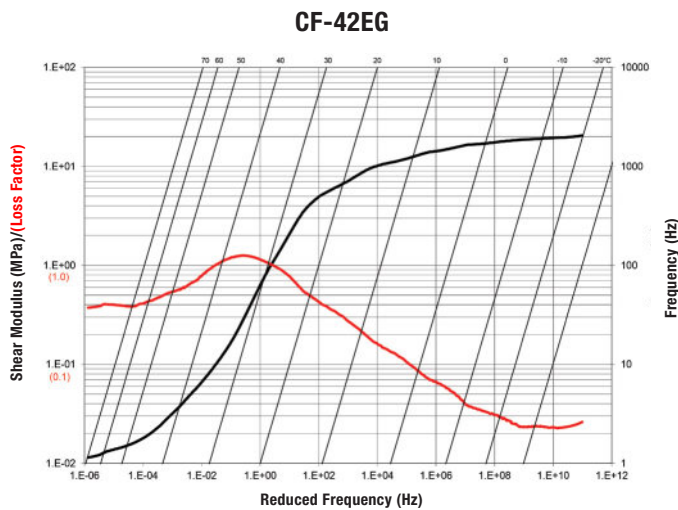
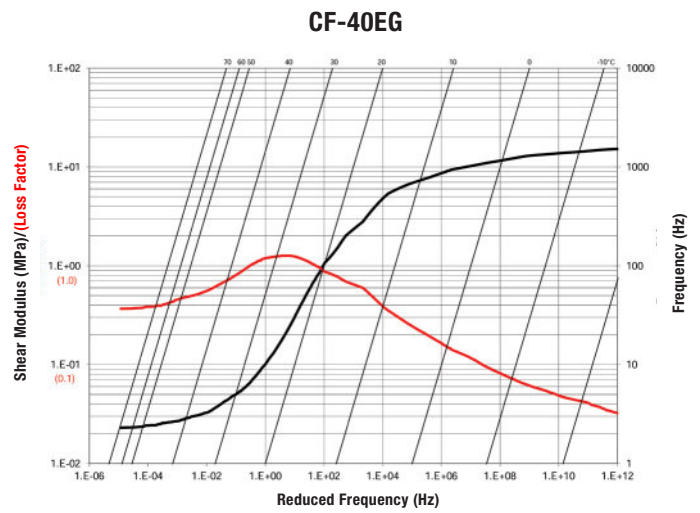
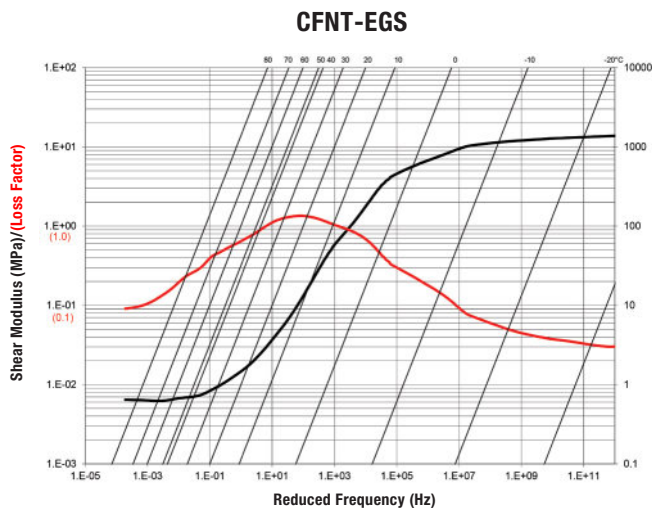
Property	CFNT-EGS	CF-40EG	CF-42EG	CF-45EG	CF-47EG
Density Nominal kg/m³ (lb/ft³) ASTM D3574	83 (5.18)	96.1 (6)	96.1 (6)	96.1 (6)	96.1 (6)
Ball Rebound % ASTM D3574	< 1	< 1	< 1	< 1	< 1
Thermal Conductivity – K Value ASTM C518 W/m*K (BTU in/hr ft ² F)	0.039 (0.27)	0.039 (0.27)	0.040 (0.28)	0.040 (0.27)	0.039 (0.27)
Compression Set (%) ASTM D357 22hr @ 22C (72 F), Compressed 50%	< 1	< 1	< 1	< 1	< 1
Indentation Force Deflection ASTM D3574 Test B1 Modified 25% Deflection for 12" x 12" x 2" sample 22C (72F) @ 50% Relative Humidity (lbf)	10-17	15-28	29-41	42-55	55-70
Tensile Strength kPa (psi) ASTM D3574, 5.1mm/min (20 in/min)	48 (6.7)	53 (7.7)	90 (13)	129 (19)	229 (33)
Tear Strength kN/m (lbf/in) ASTM D3574 5.1 mm/min (20 in/min) @ 22C (72F)	0.28 (1.6)	0.32 (1.8)	0.56 (3.2)	0.63 (3.6)	1.1 (6.5)
Tg (Peak Loss Modulus), °C DMA, 10 Hz & 0.3 amplitude, 30% compression	-2.5	2.7	6.7	14	19
Peak Tan Delta @ Temp C (F) DMA, 10 Hz & 0.3 amplitude, 30% compression	1.34 @ 22 C	1.33 @ 26 C	1.26 @ 30 C	1.17 @ 39 C	1.07 @ 46 C
Compression Load Deflection ASTM D 3574C Modified*					
Force @ 10% Compression kPa (psi)	0.83 (0.12)	1.65 (0.24)	2.83 (0.41)	3.03 (0.44)	6.89 (1.00)
Force @ 20% Compression kPa (psi)	1.1 (0.16)	1.86 (0.27)	2.90 (0.42)	3.59 (0.52)	6.89 (1.00)
Force @ 30% Compression kPa (psi)	1.2 (0.18)	2.07 (0.30)	3.31 (0.48)	4.0 (0.58)	7.58 (1.08)
Force @ 40% Compression kPa (psi)	1.5 (0.22)	2.41 (0.35)	3.93 (0.57)	4.76 (0.69)	8.96 (1.27)
Force @ 50% Compression kPa (psi)	1.8 (0.26)	3.03 (0.44)	4.96 (0.72)	6.0 (0.87)	11.03 (1.60)
Force @ 60% Compression kPa (psi)	2.4 (0.35)	4.21 (0.61)	6.89 (1.04)	8.96 (1.25)	15.86 (2.29)
Force @ 70% Compression kPa (psi)	3.9 (0.57)	7.58 (1.1)	13.1 (1.89)	16.34 (2.37)	28.96 (4.19)
Force @ 80% Compression kPa (psi)	9.0 (1.3)	21.4 (3.09)	37.9 (5.5)	51.0 (7.42)	89.63 (13.0)

The above technical information and data should be considered representative or typical only and should not be used for specification purpose.

* 12.7mm thick specimen compressed at a rate of 5.1 mm/min

Environmental Properties

Property	CFNT-EGS	CF-40EG	CF-42EG	CF-45EG	CF-47EG
Flammability UL 94 mm	Meets HBF	Listed HF-1 @ 1.5-2.2	Listed HF-1 @ 2.1-2.3	Listed HF-1 @ 0.8-2.1	Listed HF-1 @ 2.0-2.2
RoHS 3 Compliant	Yes	Yes	Yes	Yes	Yes
Halogen-free*	Yes	Yes	Yes	Yes	Yes



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CONFOR™ SC (Small Cell) Series foams are available as thin as 0.5mm for use in very thin gap spaces. Two Type 000 durometers are available.

Typical Properties

Property	CF-42SC	CF-47SC
Density Nominal kg/m3 (lbs/ft³) ASTM D 3574-03 Test A	101 kg/m3 (6.3 lbs/ft. ³)	101 kg/m3 (6.3 lbs/ft. ³)
Tensile Strength kPa (psi) ASTM D 3574-03 Test E	131 (19.1)	288.82 (41.89)
Tear Resistance kN/m (lbf/in) ASTM D 3574-03 Test F	0.53 (3.0)	1.26 (7.19)
Elongation ASTM D 3574-03 Test F	181%	142%
Compression Set (%) ASTM D3574-03 Test D- 50% Compression 22 hr at 22C (72F) 22 hr at 60C (140F)	<2%	<1% <1%
Compression Load Deflection kPa (psi) ASTM D3574-03 Test C Modified		
@ 10% Deflection	3.22 (0.47)	12.4 (1.80)
@ 20% Deflection	3.64 (0.53)	13.5 (1.96)
@ 30% Deflection	4.17 (0.60)	13.9 (2.02)
@ 40% Deflection	4.98 (0.72)	15.8 (2.30)
@ 50% Deflection	6.30 (0.91)	19.8 (2.87)
@ 60% Deflection	8.73 (1.30)	27.6 (4.00)
@ 70% Deflection	14.8 (2.10)	48.8 (7.07)
@ 80% Deflection	39.8 (5.80)	147.0 (21.30)
Dust Resistance IEC 60529-Category 2 50% Compression 70% Compression	IP 5X Rating Dust Proof Dust Proof	IP 5X Rating Dust Proof Dust Proof

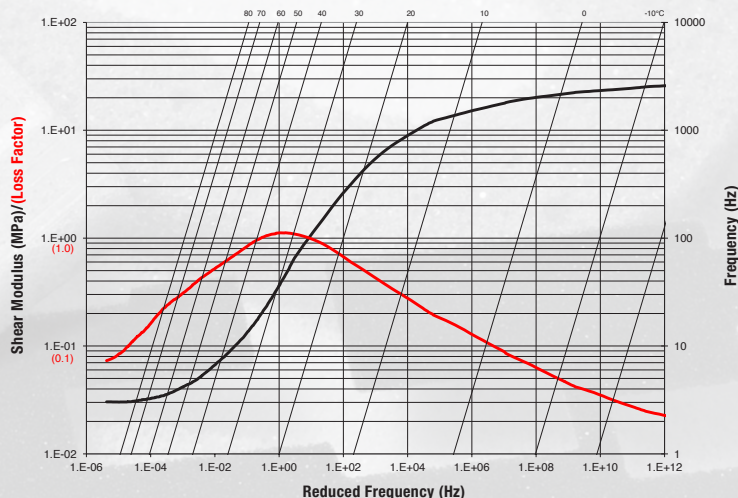
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Environmental Properties

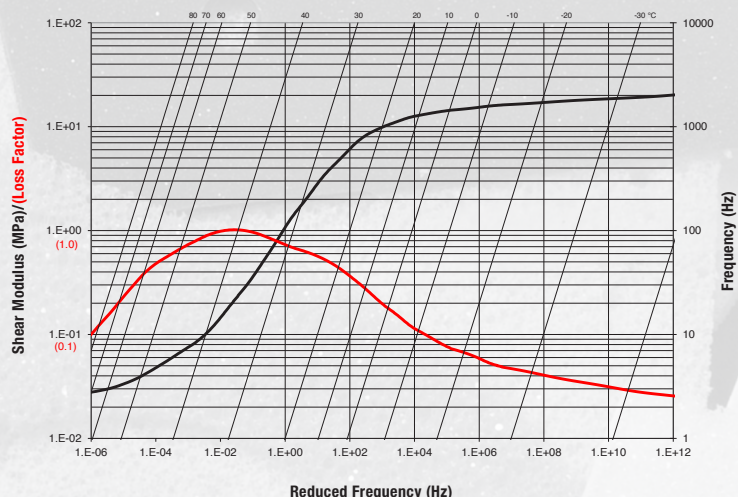
Property	CF-42SC	CF-47SC
Flammability UL 94 mm	Listed HF-1 @ 0.5-3.0	Meets HF-1 @ 1.6-3.5
RoHS 3 Compliant	Yes	Yes
Halogen-free*	Yes	Yes

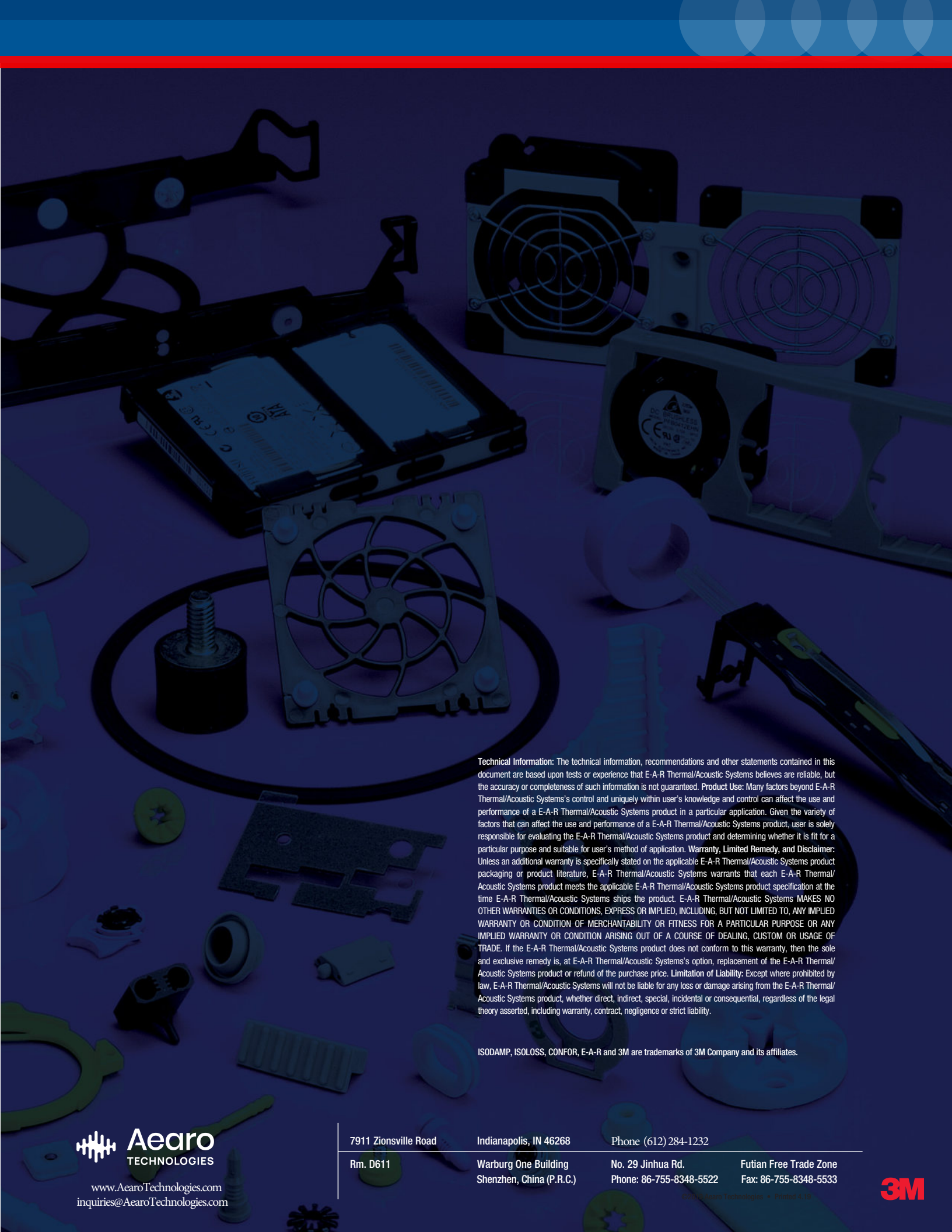
*Halogen-free per IEC 61249-2-21.

CF-42 SC



CF-47 SC





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