



DYNAMIC ISOLATION SYSTEMS

Isolator Engineering Properties

U. S. Units

DEVICE SIZE				MOUNTING PLATE DIMENSIONS					
Isolator Diameter, D_1 (in)	Isolator Height, H (in)	Number of Rubber Layers, N	Lead Diameter D_L (in)	L (in)	t (in)	Hole Qty.	Hole ϕ (in)	A (in)	B (in)
12.0	5-11	4-14	0-4	14	1	4	1 1/16	2	-
14.0	6-12	5-16	0-4	16	1	4	1 1/16	2	-
16.0	7-13	6-20	0-5	18	1	4	1 1/16	2	-
18.0	7-14	6-20	0-5	20	1	4	1 1/16	2	-
20.5	8-15	8-24	0-7	22.5	1	8	1 1/16	2	2
22.5	8-15	8-24	0-7	24.5	1	8	1 1/16	2	2
25.5	8-15	8-24	0-8	27.5	1.25	8	1 1/16	2	2
27.5	8-17	8-30	0-8	29.5	1.25	8	1 5/16	2.5	3
29.5	9-18	8-30	0-9	31.5	1.25	8	1 5/16	2.5	3
31.5	9-20	8-33	0-9	33.5	1.25	8	1 5/16	2.5	3
33.5	9-21	8-35	0-10	35.5	1.5	12	1 5/16	2.5	3.75
35.5	10-22	9-37	0-10	37.5	1.5	12	1 5/16	2.5	3.75
37.5	10-23	10-40	0-11	39.5	1.5	12	1 5/16	2.5	3.75
39.5	11-25	11-40	0-11	41.5	1.5	12	1 9/16	3	4.5
41.5	12-26	12-45	0-12	43.5	1.75	12	1 9/16	3	4.5
45.5	13-30	14-45	0-13	47.5	1.75	12	1 9/16	3	4.5
49.5	14-30	16-45	0-14	52.5	1.75	16	1 9/16	3	4.5
53.5	16-30	18-45	0-15	56.5	2	16	1 9/16	3	4.5
57.1	17-30	20-45	0-16	60	2	20	1 9/16	3	4.5
61.0	18-30	22-45	0-16	64	2	20	1 9/16	3	4.5

(1) The axial load capacities provided correspond to maximum displacements based on design limits of 250% rubber shear strain or 2/3 the isolator diameter. An isolator's actual displacement and load capacity are dependent on the rubber modulus and number of rubber layers.

(2) Rubber Shear Moduli (G) are available from 55 psi to 100 psi.

(3) Elastic Stiffness (K_e) for analytical modeling may be taken as 10-times the yielded stiffness (K_d).

(4) K_d range shown in table is typical for most projects. If needed for specific projects, K_d values up to three times the maximum shown in the range can be achieved by limiting the displacement capacity to 2/3 of the shown value.

Isolator Diameter, D_1 (in)	DESIGN PROPERTIES			Maximum Displacement, D_{max} (in)	Axial Load Capacity, P_{max} (kips)
	Yielded Stiffness, K_d (k/in)	Characteristic Strength, Q_d (kips)	Compression Stiffness, K_v (k/in)		
12.0	1-2	0-15	>250	6	100
14.0	1-2	0-15	>500	6	150
16.0	2-3	0-25	>500	8	200
18.0	2-4	0-25	>500	10	250
20.5	2-4	0-40	>1,000	12	300
22.5	3-5	0-40	>3,000	14	400
25.5	3-6	0-50	>4,000	16	600
27.5	3-8	0-50	>4,500	18	700
29.5	4-9	0-60	>5,000	18	800
31.5	4-9	0-60	>6,000	20	900
33.5	4-10	0-80	>7,000	22	1,100
35.5	4-11	0-80	>8,000	22	1,300
37.5	4-12	0-110	>10,000	24	1,500
39.5	5-12	0-110	>11,000	26	1,700
41.5	5-12	0-130	>12,000	28	1,900
45.5	6-12	0-150	>16,000	30	3,100
49.5	7-13	0-170	>21,000	32	4,600
53.5	8-14	0-200	>29,000	34	6,200
57.1	9-14	0-230	>30,000	36	7,500
61.0	10-14	0-230	>37,000	36	9,000

