SELECTION CHART FOR SUPER-CUSHION® AIR SPRING ISOLATORS

Here is a brief explanation of the Selection Chart that follows:

1. The two-page selection chart on the following pages covers the specifications for Super-Cushion air springs used as isolators in vehicular applications.

2. Where bellows air springs are listed, the same specifications are listed under the headings; “Max. Outside Diameter” and “Max. Extended Height” for each bellows air spring using the same flexible member. Variations in “Compressed Height” and “Useable Stroke” are produced when an internal bumper is specified.

The shaded areas below the initial entry for a specific bellows air spring represent optional air fitting accommodations and bumpers as listed.

3. In the selection chart there is a column titled; “Approximate Isolation Percent.” The figures in this column reflect the approximate percentage of isolation obtainable if the design height is at the center of the design height range, and the load per air spring is within the design load range. If the design height is above or below the design height range, vibration isolation may be slightly higher or lower, respectively.

SELECTION CHART FOR SUPER-CUSHION® AIR SPRING ISOLATORS

Assembly Number	Max OD @100 PSIG (Inches)	Design Load Range (Pounds)	Design Height Range (inches)	Usable Stroke (Inches)	Min Comp Height (Inches)	Max Ext Height (Inches)	Bumper Included	Approximate Isolation Percent For a Disturbing Frequency Of:				Air Fitting Size (Inches)
								435 CPM	870 CPM	1160 CPM	1750 CPM	
1S3-013	3.6	90-580	2.0-3.0	2.1	1.5	3.6	NO	71.0	93.0	96.3	98.2	1/8 CS
1S3-011	3.25	70-400	5.0-6.0	4.4	3.6	8.0	NO	92.0	97.8	98.7	99.5	1/8 CS
1S4-007	4.6	160-850	3.8-4.4	4.9	2.2	7.1	NO	90.0	97.4	98.4	99.3	1/8 CS
1S4-008	4.6	150-800	6.5-7.5	6.5	4.0	10.5	NO	95.0	98.5	99.2	99.6	1/8 CS
1S5-010	5.6	180-1100	3.8-4.3	4.0	2.2	6.2	NO	90.0	97.5	98.5	99.4	1/8 CS
1S5-005	5.7	170-1100	6.2-7.2	5.5	4.0	9.5	NO	95.0	98.6	99.2	99.6	1/8 CS
1S5-006	5.6	190-1150	7.0-9.0	6.5	4.0	10.5	NO	96.0	99.0	99.3	99.7	1/8 CS
1S6-023	7.0	260-1600	7.0-8.6	6.8	4.1	10.9	NO	94.0	98.4	99.1	99.6	1/8 CS
1B5-500	5.7	210-1350	2.5-3.0	2.0	1.8	3.8	NO	72.0	94.0	96.3	98.3	1/4 C
1B5-502	5.7	210-1350	2.5-3.0	2.0	1.8	3.8	NO	72.0	94.0	96.3	98.3	3/4 C
1B5-503	5.7	210-1350	2.5-3.0	2.0	1.8	3.8	NO	72.0	94.0	96.3	98.3	1/4 TV
1B5-510	6.0	190-1500	2.5-4.0	3.0	1.8	4.8	NO	82.0	96.0	97.5	99.0	1/4 C
1B5-512	6.0	190-1500	2.5-4.0	3.0	1.8	4.8	NO	82.0	96.0	97.5	99.0	3/4 C
1B5-520	6.5	190-1500	3.5-5.0	4.0	1.8	5.8	NO	83.0	96.2	97.6	99.0	1/4 C
1B5-521	6.5	190-1500	3.5-5.0	4.0	1.8	5.8	NO	83.0	96.2	97.6	99.0	3/4 C
1B6-530	6.5	280-1900	3.0-4.0	2.8	2.0	4.8	NO	78.0	95.0	97.0	98.6	1/4 C
1B6-531	6.5	280-1900	3.0-4.0	2.8	2.0	4.8	NO	78.0	95.0	97.0	98.6	1/4 OS
1B6-532	6.5	280-1900	3.0-4.0	2.5	2.3	4.8	YES	78.0	95.0	97.0	98.6	1/4 OS
1B6-535	7.0	250-2100	4.0-6.0	5.3	2.0	7.1	NO	90.0	97.4	98.4	99.3	1/4 C
1B6-536	7.0	250-2100	4.0-6.0	5.3	2.0	7.1	NO	90.0	97.4	98.4	99.3	1/4 OS
1B6-538	7.0	250-2100	4.0-6.0	4.8	2.3	7.1	YES	90.0	97.4	98.4	99.3	1/4 OS
2B6-530	6.5	180-2000	4.5-6.5	4.5	2.8	7.7	NO	85.0	96.0	97.5	99.2	1/4 C
2B6-531	6.5	180-2000	4.5-6.5	4.5	2.8	7.7	NO	85.0	96.0	97.5	99.2	1/4 OS
2B6-532	6.5	180-2000	4.5-6.5	4.3	3.4	7.7	YES	85.0	96.0	97.5	99.2	1/4 OS
2B6-535	7.0	300-2200	5.0-7.0	6.3	2.8	9.1	NO	92.0	97.5	98.3	99.3	1/4 OS
2B6-536	7.0	300-2200	5.0-7.0	5.7	3.4	9.1	YES	92.0	97.5	98.3	99.3	1/4 OS
1B7-540	7.7	260-2200	4.0-5.0	3.2	2.0	5.2	NO	83.0	96.1	97.6	99.0	1/4 C
1B7-541	7.7	260-2200	4.0-5.0	3.2	2.0	5.2	NO	83.0	96.1	97.6	99.0	1/4 OS
1B7-542	7.7	260-2200	4.0-5.0	2.9	2.3	5.2	YES	83.0	96.1	97.6	99.0	1/4 OS
2B7-540	8.0	230-2500	6.0-8.0	6.5	2.5	9.0	NO	91.0	97.8	98.7	99.5	1/4 C
2B7-541	8.0	230-2500	6.0-8.0	6.5	2.5	9.0	NO	91.0	97.8	98.7	99.5	1/4 OS
2B7-542	8.0	230-2500	6.0-8.0	5.7	3.3	9.0	YES	91.0	97.8	98.7	99.5	1/4 OS
2B7-545	8.0	230-2500	6.0-8.0	6.5	2.5	9.0	NO	91.0	97.8	98.7	99.5	1/2 C
2B7-546	8.0	230-2500	6.0-8.0	6.5	2.5	9.0	NO	91.0	97.8	98.7	99.5	3/4 C
1B8-550	8.7	320-2900	3.75-4.75	3.3	2.0	5.3	NO	83.0	96.3	97.6	99.0	1/4 C
1B8-552	8.7	320-2900	3.75-4.75	3.3	2.0	5.3	NO	83.0	96.3	97.6	99.0	3/4 C
1B8-553	8.7	320-2900	3.75-4.75	3.3	2.0	5.3	NO	83.0	96.3	97.6	99.0	1/4 OS
1B8-554	8.7	320-2900	3.75-4.75	3.0	2.3	5.3	YES	83.0	96.3	97.6	99.0	1/4 OS
1B8-560	9.4	180-3300	4.0-6.5	4.7	2.0	6.7	NO	85.0	96.6	97.9	99.1	1/4 C
1B8-562	9.4	180-3300	4.0-6.5	4.7	2.0	6.7	NO	85.0	96.6	97.9	99.1	3/4 C
1B8-563	9.4	180-3300	4.0-6.5	4.7	2.0	6.7	NO	85.0	96.6	97.9	99.1	1/4 OS
1B8-564	9.4	180-3300	4.0-6.5	4.4	2.3	6.7	YES	85.0	96.6	97.9	99.1	1/4 OS
2B8-550	8.8	440-2700	7.0-8.0	7.2	2.9	10.1	NO	93.5	97.9	98.8	99.6	1/4 C
2B8-552	8.8	440-2700	7.0-8.0	7.2	2.9	10.1	NO	93.5	97.9	98.8	99.6	3/4 C
2B8-553	8.8	440-2700	7.0-8.0	7.2	2.9	10.1	NO	93.5	97.9	98.8	99.6	1/4 OS
2B8-554	8.8	440-2700	7.0-8.0	6.6	3.5	10.1	YES	93.5	97.9	98.8	99.6	1/4 OS

NOTE: TV = TANK VALVE, OS = OFFSET (FROM CENTER), C = CENTERED, CS = COMBO STUD

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Assembly Number	Max OD @100 PSIG (Inches)	Design Load Range (Pounds)	Design Height Range (inches)	Usable Stroke (Inches)	Min Comp Height (Inches)	Max Ext Height (Inches)	Bumper Included	Approximate Isolation Percent For a Disturbing Frequency Of:				Air Fitting Size (Inches)
								435 CPM	870 CPM	1160 CPM	1750 CPM	
1B9-202	11.0	640-3900	4.5-5.0	3.7	2.2	5.9	NO	84.0	96.6	97.8	99.0	1/4 OS
2B9-200	10.3	340-3700	7.5-9.5	7.6	3.2	10.8	NO	92.0	97.8	98.7	99.5	1/4 OS
2B9-201	10.3	340-3700	7.5-9.5	7.0	3.8	10.8	YES	92.0	97.8	98.7	99.5	1/4 OS
2B9-216	10.3	340-3700	7.5-9.5	7.6	3.2	10.8	NO	92.0	97.8	98.7	99.5	3/4 OS
2B9-250	10.3	540-3800	8.0-10.0	8.7	3.5	12.2	NO	93.3	98.1	99.0	99.5	1/4 OS
2B9-251	10.3	540-3800	8.0-10.0	8.4	3.8	12.2	YES	93.3	98.1	99.0	99.5	1/4 OS
2B9-253	10.3	540-3800	8.0-10.0	8.4	3.8	12.2	YES	93.3	98.1	99.0	99.5	1/4 OS
1B12-313	13.2	1350-8800	3.0-5.0	4.9	2.3	7.2	NO	89.0	97.3	98.4	99.3	1/4 OS
2B12-309	13.0	900-7200	7.5-9.5	6.9	4.2	11.1	YES	92.0	98.0	98.9	99.5	1/4 OS
2B12-425	13.0	900-7200	7.5-9.5	7.7	3.4	11.1	NO	92.0	98.0	98.9	99.5	1/4 OS
2B12-429	13.0	900-7200	7.5-9.5	7.7	3.4	11.1	NO	92.0	98.0	98.9	99.5	3/4 OS
2B12-440	13.7	1300-8100	7.5-9.5	10.6	3.8	14.4	YES	92.5	98.1	99.0	99.5	1/4 OS
3B12-304	12.9	850-7100	11.0-15.0	13.2	4.8	18.0	NO	94.0	98.4	99.1	99.6	1/4 OS
3B12-305	12.9	850-7100	11.0-15.0	13.2	4.8	18.0	NO	94.0	98.4	99.1	99.6	3/4 OS
1B14-350	15.2	1900-11900	4.0-5.25	4.9	2.3	7.2	NO	86.0	96.8	98.0	99.2	1/4 OS
1B14-362	15.9	2250-13,560	3.25-5.25	5.5	2.8	8.3	NO	87.0	97.0	98.1	99.2	3/4 OS
2B14-354	15.1	1500-11100	7.5-9.5	7.6	3.7	11.3	NO	93.0	98.1	99.0	99.5	1/4 OS
2B14-355	15.1	1500-11100	7.5-9.5	6.4	4.9	11.3	YES	93.0	98.1	99.0	99.5	1/4 OS
2B14-362	16.0	2000-13100	7.5-9.5	11.4	4.5	15.2	NO	93.0	98.2	99.0	99.5	1/4 OS
2B14-363	16.0	2000-13100	7.5-9.5	11.4	4.5	15.2	NO	93.0	98.2	99.0	99.5	3/4 OS
2B14-452	16.0	2000-13100	7.5-9.5	11.0	4.2	15.2	YES	93.0	98.2	99.0	99.5	1/4 OS
3B14-354	15.5	1900-12100	10.5-12.5	13.0	5.0	18.0	NO	96.4	99.0	99.4	99.7	1/4 OS
1B15-375	17.5	2200-13700	4.4-5.4	5.6	2.3	7.9	NO	91.0	97.5	98.6	99.4	1/4 OS
2B15-375	16.5	2000-12300	7.5-9.5	9.1	3.7	12.8	NO	93.0	98.2	99.2	99.5	1/4 OS
3B15-375	16.5	2200-12800	10.5-12.5	12.3	4.7	17.0	NO	95.5	98.8	99.3	99.6	1/4 OS
2B19-8433	20.5	3200-23700	7.0-10.0	8.8	3.2	12.0	NO	95.0	98.6	99.1	99.6	–
2B22-8539	23.0	5200-31700	7.0-9.0	9.3	3.2	12.5	NO	96.0	98.8	99.2	99.7	–
1R8-005	8.7	560-3100	10.5-13.0	12.8	5.8	18.6	NO	95.3	98.7	99.2	99.6	1/4 CS
1R8-009	8.7	480-2700	10.5-13.0	11.8	6.8	18.6	YES	96.0	98.9	99.3	99.6	1/4 CS
1R9-009	9.5	800-4400	6.0-7.5	8.6	3.2	11.8	NO	91.0	97.8	98.6	99.4	1/4 CS
1R9-003	9.5	560-3700	8.0-12.0	12.3	5.6	17.9	NO	93.0	98.2	99.0	99.5	1/4 CS
1R10-089	11.0	900-5200	9.5-13.5	14.1	6.0	20.1	NO	96.1	99.0	99.3	99.7	1/4 CS
1R11-028	11.5	1100-6700	6.0-10.0	9.3	3.7	13.0	NO	95.0	98.7	99.2	99.6	1/4 CS
1R11-039	11.3	1300-7000	8.0-12.0	10.9	6.1	17.0	YES	94.0	98.6	99.1	99.5	1/4 CS
1R12-095	12.7	1350-7300	7.0-9.0	9.1	4.4	13.5	YES	94.0	98.4	99.1	99.6	1/4 CS
1R12-132	12.7	1400-7600	8.0-10.0	10.8	6.1	16.9	YES	93.0	98.2	99.0	99.5	1/4 CS
1R12-092	12.7	1350-7600	10.5-16.5	13.4	7.7	21.1	YES	96.0	99.0	99.3	99.7	1/4 CS
1R12-274	12.7	1450-7300	11.3-14.3	14.7	8.1	22.8	YES	96.8	99.1	99.5	99.7	1/4 CS
1R12-103	12.7	1300-7300	15.0-20.0	17.6	9.4	27.0	YES	96.5	99.1	99.4	99.7	1/4 CS
1R12-256	12.7	1350-7300	16.0-20.0	19.6	9.5	29.1	YES	96.3	99.0	99.4	99.7	1/4 CS
1R14-037	14.8	1900-11000	7.5-11.0	12.3	5.7	18.0	YES	92.0	98.0	99.8	99.5	1/4 OS
1R14-018	14.6	1500-8500	11.0-16.5	14.8	7.7	22.5	YES	96.3	99.0	99.4	99.7	1/4 OS
1R14-019	14.6	1500-8500	14.0-18.0	16.9	8.9	25.8	YES	96.7	99.1	99.5	99.7	1/4 OS

NOTE: TV = TANK VALVE, OS = OFFSET (FROM CENTER), C = CENTERED, CS = COMBO STUD