

Miniature Shock Absorbers

Material: Shock absorber and accessories: Steel, black oxide finish.
Button: hardened. Piston rod: hardened, stainless steel.

Miniature shock absorbers are maintenance-free, self-contained hydraulic elements. The adjustable miniature shock absorbers can be perfectly set up for the respective application. They include an integrated mechanical stop. Due to the long stroke length, the unit offers smooth deceleration and low reaction forces.

These shock absorbers are ideal for absorbing fast movements in small linear units, handling modules, robotics systems and other applications.

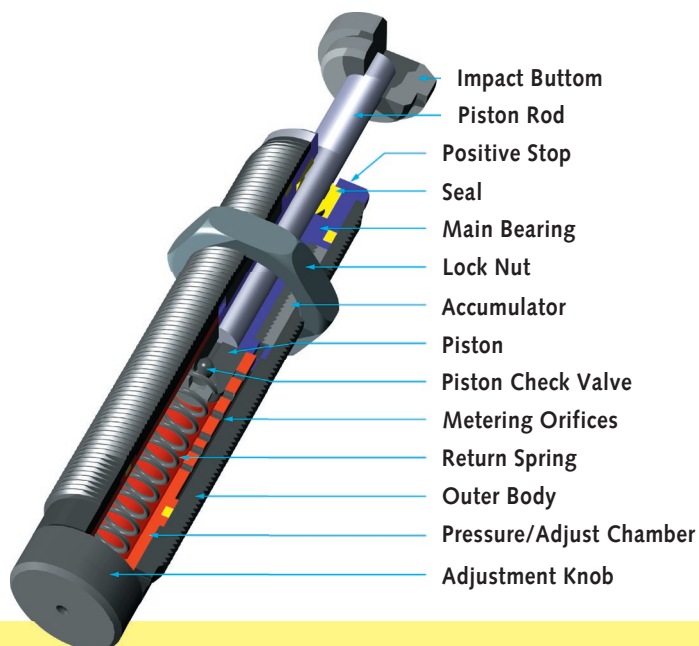
Adjustment: by turning the adjustment screw. After installation, cycle the machine a few times, turning the adjustment screw until optimum deceleration is achieved.

Impact velocity range: 0.3 to 3.6 m/s.

Exceeding W_4 (max. energy absorption per hour) is possible, if the unit is turned off from time to time or the shock absorber is cooled with the cylinder exhaust air.

Mounting position: optional.

Permissible temperature range: 0°C to 66°C.

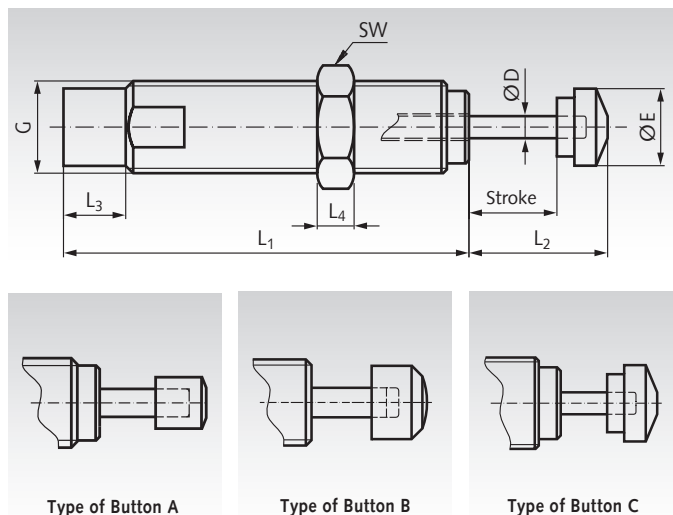


Capacity Chart

Product No.	Max. Energy Capacity		Effective Weight me adjustable		Return Force N	Rod Reset Time s	Max. Side Load Angle Degrees
	per Cycle W_3 Nm	per hour W_4 Nm	min. kg	max. kg			
690 030 00	3,5	5650	0,23	15	1 - 5	0,3	2
690 050 00	5,5	5100	4,5	20	3 - 6	0,3	2
690 035 00	4	6000	5,9	57	5 - 11	0,2	2
690 150 00	22	35000	1,0	109	3 - 5	0,4	5*
690 225 00	25	45000	2,3	226	5 - 10	0,1	2*
690 600 00	68	68000	9,0	1360	10 - 30	0,2	2*
690 900 00	100	90000	14	2040	10 - 35	0,4	1

* For higher side load angles consider using the Side Load Adaptor (on request).

Dimensions



Ordering Details: e.g.: Product No. 690 030 00, Miniature Shock Absorbers, Stroke 8 mm

Product No. Miniature Shock Absorber	L ₁ mm	L ₂ mm	L ₃ mm	L ₄ mm	stroke mm	D mm	E mm	G Thread	Width Across Flats SW mm	Type of Button	Weight g	Product No. additional lock nut	Weight Lock nut g
690 030 00	48	13,1	4,1	3	8	3,2	6,4	M8x1	10	A	25	690 030 04	0,8
690 050 00	50	14,9	5,1	4	7	3,2	7,7	M10x1	12	A	30	690 050 04	1,4
690 035 00	66	18	5	5	10	3,2	7,7	M12x1	14	A	43	690 035 04	2,4
690 150 00	70	22,5	7,5	6	12,5	4,8	12	M14x1,5	17	B	60	690 150 04	4,8
690 225 00	88	30	13,5	8	19	4,8	17	M20x1,5	23	C	130	690 225 04	8
690 600 00	106,6	36,4	16,5	10	25,4	6,3	23	M25x1,5	30	C	310	690 600 04	18
690 900 00	138	51	16,5	10	40	6,3	23	M25x1,5	30	C	400	690 600 04	18