The Adjustable Cushioneer

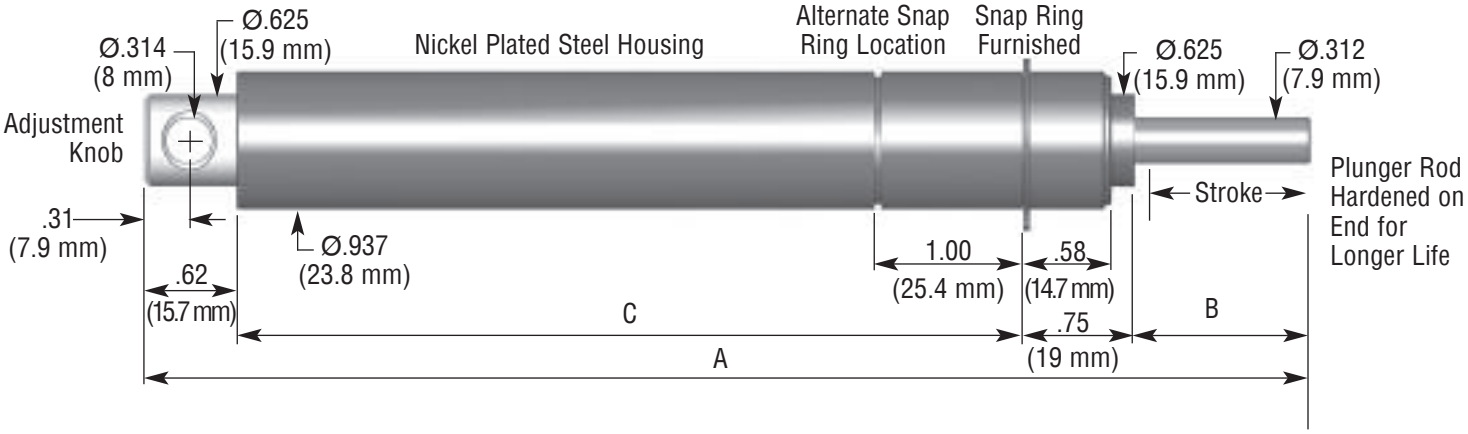

Table 1

Choose Your Adjustable Cushioneer From This Table

Model Number	2003-31-½	2002-31-½	2003-31-1	2002-31-1	2003-31-2	2002-31-2
Application	Light Duty	Standard Duty	Light Duty	Standard Duty	Light Duty	Standard Duty
Stroke Length	.5 in (12.7mm)	.5 in (12.7mm)	1 in (25.4 mm)	1 in (25.4 mm)	2 in (50.8 mm)	2 in (50.8 mm)
Plunger Return Force	3.75 lbs (16.7 N)	4.00 lbs (17.8 N)	3.75 lbs (16.7 N)	4.00 lbs (17.8 N)	4.00 lbs (17.8 N)	4.00 lbs (17.8 N)
Plunger Return Time*	0.015 sec	0.031 sec	0.036 sec	0.058 sec	0.066 sec	0.106 sec
Single Impact Capacity	2 to 200 in-lbs (0.2 to 22.6 Nm)	4 to 400 in-lbs (0.4 to 45.2 Nm)	4 to 400 in-lbs (0.4 to 45.2 Nm)	8 to 800 in-lbs (0.9 to 90.4 Nm)	8 to 800 in-lbs (0.9 to 90.4 Nm)	16 to 1,600 in-lbs (1.8 to 180.8 Nm)
Sustained Capacity**	9,000 in-lbs/min (1,017 Nm/min)		10,000 in-lbs/min (1,130 Nm/min)		11,500 in-lbs/min (1,300 Nm/min)	
Weight	10.0 oz (284 g)		11.0 oz (312 g)		14.5 oz (411 g)	
Dimension A	6.33 in (160.8 mm)		7.83 in (198.9 mm)		10.87 in (276.1 mm)	
Dimension B	0.69 in (17.5 mm)		1.19 in (30.2 mm)		2.19 in (55.6 mm)	
Dimension C	4.28 in (108.7 mm)		5.28 in (134.1 mm)		7.31 in (185.7 mm)	

Minimum force to operate plunger full stroke: 5 lbs. (22.2 N)	**Minimum operating temperature:** 40° F (4.4°C)
Maximum velocity of load striking plunger: 144 in/sec (365 cm/sec)	**Maximum operating temperature:** 130° F (54°C)

* Cushioneer completes its deceleration action 1/32" (0.8 mm) before the plunger reaches the bottom of the stroke. Return times shown apply only if plunger is not permitted to bottom. ** Values shown for sustained capacity are for operating temperatures below 130°F (54°C).

ADJUSTABLE CUSHIONEER The patented adjustment on Cushioneers is radically different in design. During a working stroke, the piston gradually closes an entire meshwork of up to 25 fluid escape ports in the high pressure cylinder to decelerate and stop the moving load. Rotation of the adjustment knob alters the flow restriction at all escape ports according to the effect each port has on the decelerating action. This adjustment of all the ports prevents jerky action and allows you to dial in a smooth rate of deceleration for fast, slow, heavy or light loads after the Cushioneer is installed.

EASY TO ADJUST Insert a rod in cross hole of adjustment knob and rotate knob until moving load settles softly against your safety stop. Plunger is automatically returned outward by light internal spring force as load is removed.

200_-31-2 **200_-31-1** **200_-31-½**

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