

Ace SC High-Cycle self-compensating shock absorbers are engineered for high-speed equipment applications.

They offer a short stroke, quick time through stroke and quick rod-ready time. In addition, these dependable self-compensating miniatures are capable of rapid repeat strokes. The result is faster cycling for your equipment and gains in production time for you.

Applications

Applications include: packaging equipment, slides, rotary actuators, small and medium robotics, machine tools, pick & place operations and more.

Technical Support

For more information contact your local Ace area manager or visit our website. Here you can download our complete catalogue, request application support and access online or download our shock absorber selection program and 2D and 3D CAD drawings for all Ace motion control products and accessories.

Technical Data

Impact velocity range:

SC 25M5-HC:	0.30 to 2.12 m/sec
SC 25M6-HC:	0.10 to 1.05 m/sec
SC 25M7-HC:	0.03 to 0.32 m/sec
SC 75M5-HC:	0.46 to 4.12 m/sec
SC 75M6-HC:	0.15 to 1.58 m/sec
SC 75M7-HC:	0.05 to 0.48 m/sec
SC 190M5-HC:	0.49 to 4.45 m/sec
SC 190M6-HC:	0.17 to 1.73 m/sec
SC 190M7-HC:	0.05 to 0.54 m/sec

Oil type: SF 96-500

Impact velocity range:

SC 300-5-HC:	0.42 to 2.68 m/sec
SC 300-6-HC:	0.24 to 1.55 m/sec
SC 300-7-HC:	0.21 to 0.95 m/sec
SC 300-8-HC:	0.11 to 0.77 m/sec
SC 300-9-HC:	0.06 to 0.51 m/sec
SC 650-5-HC:	0.49 to 3.46 m/sec
SC 650-6-HC:	0.27 to 1.73 m/sec
SC 650-7-HC:	0.16 to 0.92 m/sec
SC 650-8-HC:	0.10 to 0.59 m/sec
SC 650-9-HC:	0.06 to 0.39 m/sec

Oil Type: ACE #5

Operating temperature: 0° to 66°C

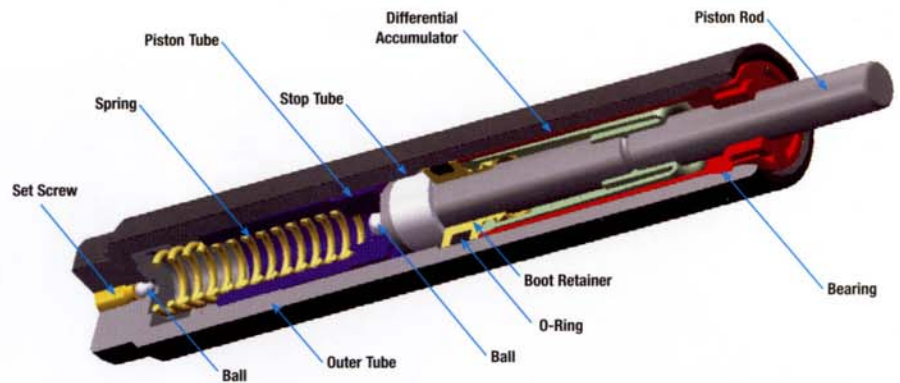
Mechanical stop: Integral mechanical stop built into the front of units.

Materials: Steel body with black oxide finish. Hardened stainless steel piston rod.

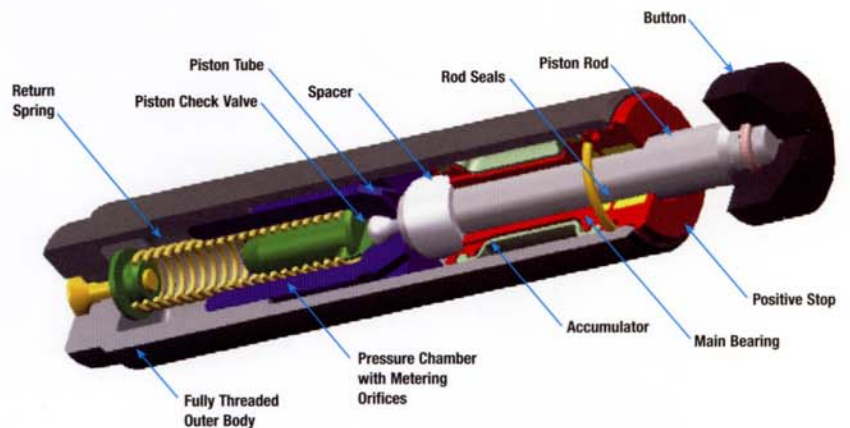
Maximum side load depends on application.

Lock nut included with each shock absorber.

SC190



SC650

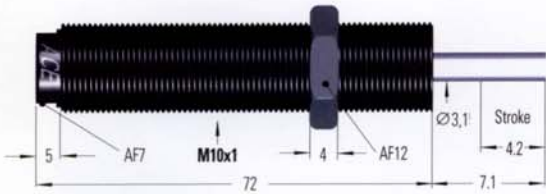


Ordering Information

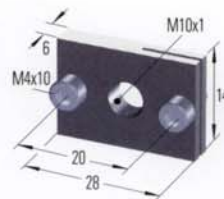
SC 190 M 5 - HC

SC Series	Model Number	Mounting Thread	Effective Weight	High-Cycle
Self-Compensating	25	SC 25M	5 Heavy	
	75	M10 x 1	6 Heavy Plus	
	190	SC 75M	7 Heavy Duty	
	300	M12 x 1	8 Extra Heavy	
	650	SC 190M	9 Ultra Heavy	
		M14 x 1.5		
		SC 300		
		M20 x 1.5		
		SC 650		
		M25 x 1.5		

SC 25 M - HC



RF 10



Rectangular Flange

MB 10 SC²



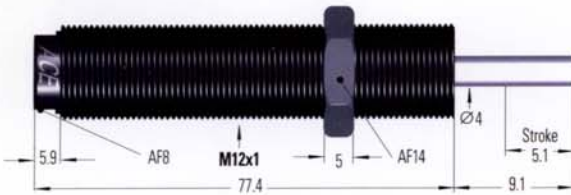
Mounting Block

AH 10

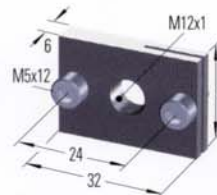


Stop Collar

SC 75 M - HC



RF 12



Rectangular Flange

MB 12



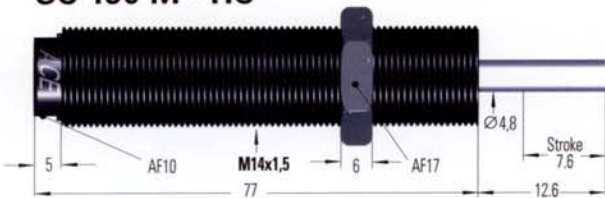
Mounting Block

AH 12

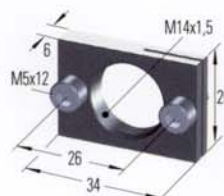


Stop Collar

SC 190 M - HC

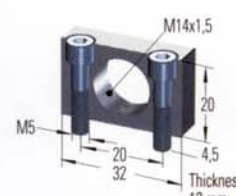


RF 14



Rectangular Flange

MB 14



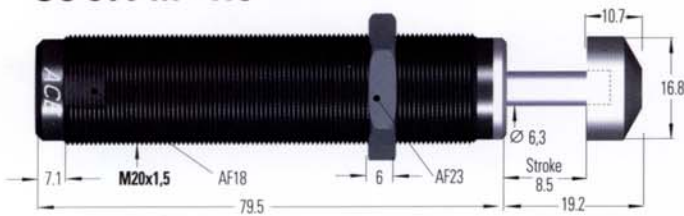
Mounting Block

AH 14

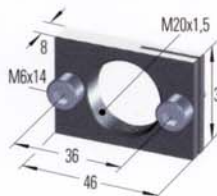


Stop Collar

SC 300 M - HC

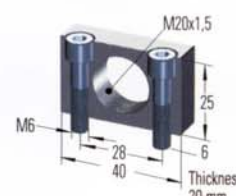


RF 20



Rectangular Flange

MB 20



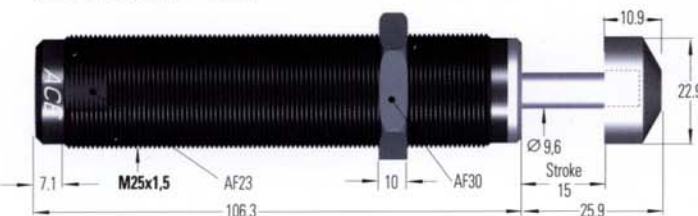
Mounting Block

AH 20

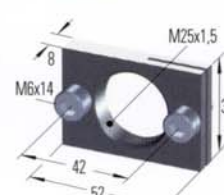


Stop Collar

SC 650 M - HC



RF 25



Rectangular Flange

MB 25



Mounting Block

AH 25



Stop Collar

Capacity Chart

Type	Max. Energy Capacity Nm		Effective Weight me					Return Force N	Rod Reset Time s	Weight kg
	per Cycle W ₃	per Hour W ₄	soft							
			5 min kg max	6 min kg max	7 min kg max	8 min kg max	9 min kg max			
SC 25 M-HC	2	14 200	1 - 5	4 - 44	42 - 499			8.8 - 13.7	0.2	0.03
SC 75 M-HC	8	24 100	1 - 8	7 - 78	75 - 798			8.6 - 15.1	0.3	0.04
SC 190 M-HC	20	50 600	2 - 16	13 - 140	136 - 1542			11.8	0.3	0.06
SC 300 M-HC	41	45 200	11 - 45	34 - 136	91 - 181	136 - 680	318 - 1950	11.7 - 17.4	0.2	0.15
SC 650 M-HC	135	67 800	23 - 113	91 - 363	317 - 1089	771 - 2631	1814 - 6350	21.9 - 36.9	0.2	0.34