

The oil cushions are intended to absorb the kinetic energy of a moving mass, resulting in a smooth deceleration. They will prevent rebound of linear and rotary units by bringing them to a gentle halt with less wear on the stops and components. The oil cushion should be adjusted such that it is **not** used as the final stop. Only the stopscrews are designed for this purpose.

$$E_k = \text{Kinetic Energy}$$

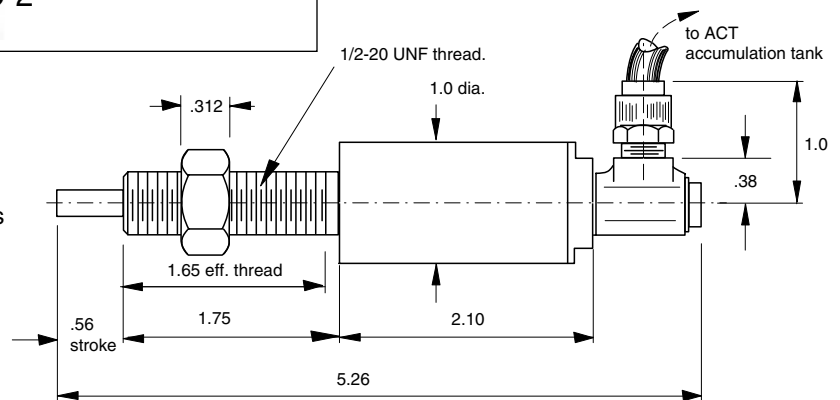
$$W = \text{Weight (lbs.)}$$

$$V = \text{Velocity (in/sec)}$$

$$E_k = \frac{W}{772} \times V^2$$

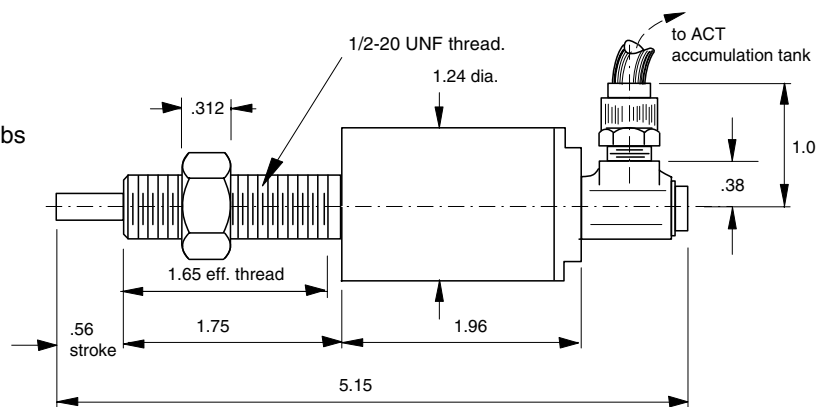
HC-1.5 Hydraulic Cushion

Kinetic Energy Absorption Range 60-800 in/lbs
Max. no. of strokes/min. 60



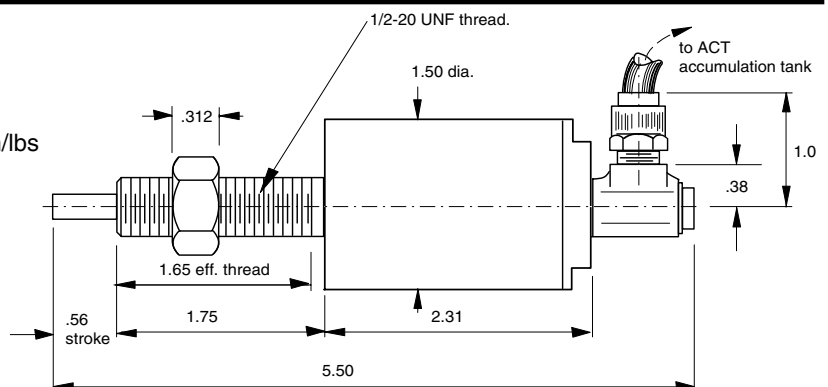
HC-2 Hydraulic Cushion

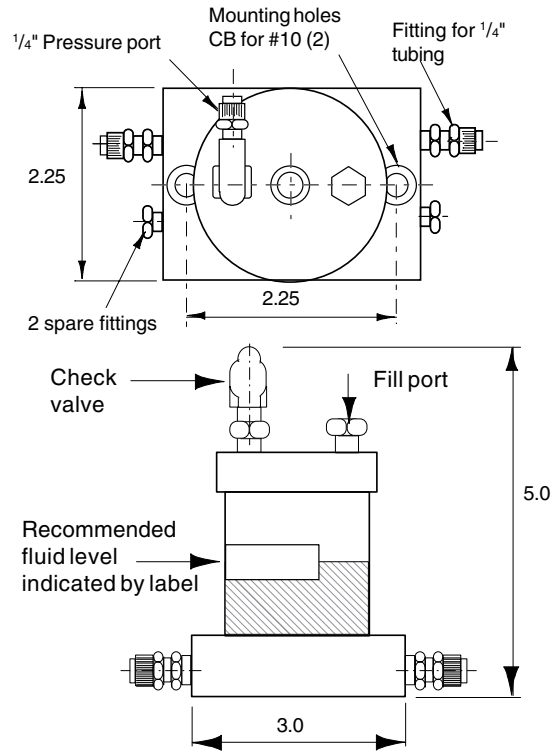
Kinetic Energy Absorption Range 80-1400 in/lbs
Max. no. of strokes/min. 60



HC-3 Hydraulic Cushion

Kinetic Energy Absorption Range 100-2000 in/lbs
Max. no. of strokes/min. 40



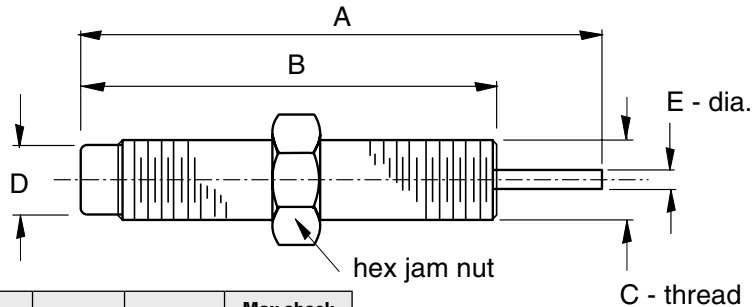


Shock Absorbers

The progressive damping characteristics and built in "self compensation" design, decelerates a moving mass by minimizing the reaction force at impact and gradually increasing the resistance force throughout the working stroke of the shock absorber. (i.e.: higher speeds with softer stops)

- Chrome plated piston rod
- Standard operating temp range 15° F. - 180° F.
- Threaded body for ease of mounting
- Progressive damping characteristics

Note: shock absorbers should be adjusted such that it is **not** used as the final stop. Stop screws are designed for this purpose (see page 86)



	Stroke	A	B	C	D	E	Max shock force
SH-1	13/32	2.38	1.97	7/16-28	3/8	.12	140 lbs
SH-2	5/8	3.84	3.20	1/2-20	7/16	.16	450 lbs
SH-2S	1/4	2.10	1.82	1/2-20	7/16	.12	250 lbs
SH-3	7/8	4.66	3.76	3/4-16	5/8	.19	700 lbs
SH-4	1.0	5.07	4.04	1-12	7/8	.25	1000 lbs