



OPTIONAL ROD END (WORKS WITH SMA-10)  
SHOWN AT MIDPOINT OF ROTATION

ROTATION	'C' DIMENSION		ADD TO 'C' RESET SIDE
	STD.	'G', 'R' OR 'S' OPT.	'Q' OPT.
12°	2.97	5.39	.06
15°	2.97	5.39	
18°	3.03	5.42	
22.5°	3.13	5.47	
30°	3.29	5.55	
36°	3.43	5.62	
45°	3.62	5.72	
60°	3.95	5.88	
72°	4.21	5.88	
90°	4.60	5.88	
120°	5.26	6.26	
180°	6.57	7.57	
360°	10.49	11.49	.06

RATINGS	
Torque Factor (Retract): in. lb./p.s.i.	.42
Torque Factor (Extend): in. lb./p.s.i.	.30
Force Factor (Retract): lb.	.70
Force Factor (Extend): lb.	1.48
Max. Working Pressure*: p.s.i.	150
Max. Torque (Non-shock): in. lb.	73
Indexing Accuracy: deg.	±.20
Back Lash (Linear Section): deg.	1
Displacement (Rotary): in. <sup>3</sup> /deg.	.0086
Working Temperature Range: °F	0 - 180
Weight 180°, 2" stroke, std. unit: lb.	6.0

\*Pressures applied to the indexer (rotary) section are limited by maximum clutch torque; higher pressures may be applied to the linear section.

**SIGNAL OPTIONS**

EXTENDED PAWL SHAFT (E): Projects 3/4" from lower face, moves 7° at index & reset.

**MAGNETIC SWITCH OPTIONS**

Reed (G) and solid state switches (R or S) are available on rotary and linear sections of unit. Switches mount to cylinders; place as required for access and phasing. Magnet only option (N) will also affect 'C' dimension.

UNCONTROLLED IMPACT WILL CAUSE DAMAGE TO UNIT. LIMIT ANGULAR MOMENTUM AND IMPACT TO 4 IN. LB. BY USING FLOW CONTROLS IN EXHAUSTING CYLINDERS. ALSO, INSTALL FLOW CONTROLS TO LIMIT LINEAR IMPACT.

- NOTES:**
- Optional angles 22.5, 18, 15 and 12 deg. require special mechanism but are housed in 30 deg. envelope.
  - Stop tubes are available to stabilize the extended shaft. Standard lengths are 1" and 2"; add to unit height. Sleeves for switch magnets serve the same function.
  - Allen wrench clearance at flow control & adjuster screws not shown.
  - Needle valve projects approximately 5/8" at 1, 2, 3 or 4 (See option pages). Write preferred location; may differ end to end.