



screwjacks

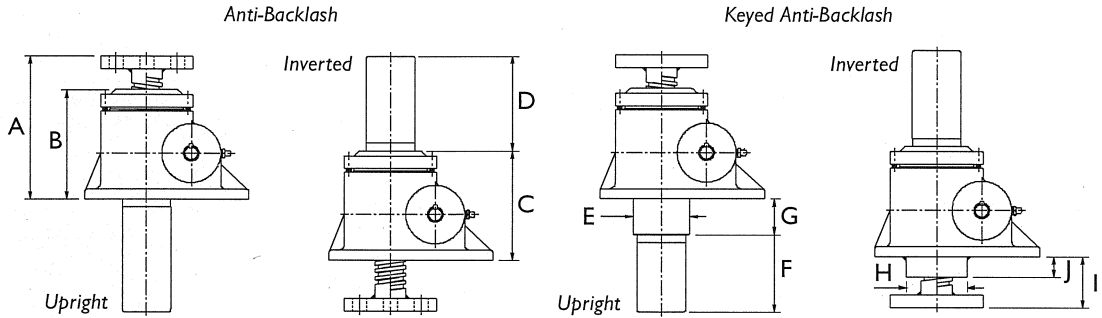
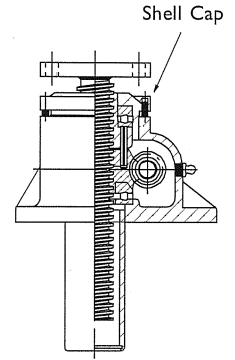
1.2.3.6. Imperial Actuators with Anti-Backlash Feature

Imperial actuators are available with anti-backlash nuts for applications where a reversal of loading from tension to compression is encountered. These are based on the 1800 and 9000 series actuators and are designated 4800 and 9400 series.

Anti-Backlash Features

- Reduction in the vertical backlash between the screw and the worm gear nut to a practical minimum for smoother, more precise operation and minimum wear.
- Acts as a safety device, providing a dual nut load carrying unit, when the worm gear becomes worn.
- Wear indicator for critical applications.

The anti-backlash feature can be maintained by adjusting the shell cap until the desired amount of backlash is achieved. To avoid binding and excessive wear, do not adjust lifting screw backlash to less than 0.005".



Standard Dimensions (inches)

Anti-Backlash					Keyed Anti-Backlash						
Model	A	B	C	D	Model	E	F	G	H	I	J
4555	4	2.38	2.38	Raise + 0.75	4555-K	1.5	Raise + 0.75	0.75	1.5	2	0.75
4625	4	2.88	2.43	Raise + 0.75	4625-K	1.25	Raise + 0.75	0.81	1.25	2	0.81
4501	5	3.84	3.38	Raise + 1.63	4501-K	1.06	Raise + 1.13	0.75	1.5	2	0.75
4802	5.25	3.88	3.88	Raise + 0.75	4802-K	2.25	Raise - 0.13	1.25	2.25	1.75	0.63
4805	7	5.43	5.43	Raise - 0.25	4805-K	2.75	Raise + 0.38	1.75	2.75	2.5	0.88
4810	7.25	5.75	5.75	Raise	4810-K	3.38	Raise	2	3.38	2.75	1.13
4815	8	6.13	6.13	Raise	4815-K	3.63	Raise	2	3.63	2.75	1.25
4820	9.5	7.75	7.75	Raise + 0.75	4820-K	4.0	Raise + 0.75	1.5	4	3	1.0
4825	12	9.69	9.69	Raise + 1	4825-K	5.5	Raise	2.25	5.5	3	1.25
9435	13	9.44	9.44	Raise + 1.75	9435-K	6.5	Raise + 0.69	2.38	6.5	4	1.25
4850	14	11.75	11.75	Raise + 1.75	4850-K	7.0	Raise + 0.75	3	7.0	5	3.0
9475	18.5	15.25	15.25	Raise + 1	9475-K	7.5	Raise + 1	4	7.5	6.5	4.0
4899	26.5	18.06	18.06	Raise + 0.5	4899-K	8.5	Raise + 1	5	8.5	12	5.0
48150	26.5	18.06	18.06	Raise + 0.5	48150-K	10	Raise + 1	5.56	10	12	5.56

Torque and Efficiencies for Standard Anti-Backlash Actuators

Model	Upright	4555	4625	4501	4802	4805	4810	4815	4820	4825	9435	4850	9475	4899	48150
	Inverted	4554	4624	4500	4801	4804	4809	4814	4819	4824	9434	4849	9474	4898	48149
Capacity, Short Tons		0.25	0.5	1	2	5	10	15	20	25	35	50	75	100	150
Start-Up Torque at Full Load (in.lb)	Std Ratio	15	24	60	135	500	1005	1658	2261	3712	5083	8022	13204	17004	31330
	Option I	-	-	27	56	228	526	904	1228	1997	3014	4542	7314	9210	17225
Efficiency Rating	Std Ratio	0.277	0.168	0.212	0.196	0.199	0.198	0.180	0.176	0.134	0.137	0.124	0.113	0.117	0.127
	Option I	-	-	0.117	0.119	0.109	0.126	0.110	0.108	0.083	0.077	0.073	0.068	0.072	0.077
Weight with Base Raise of 6" (lbs)		2.5	2.5	6	18	37	55	70	101	197	250	440	750	1325	1475

Note For loads from 25% to 100% of actuator capacity, torque requirements are proportional to the load.