



Model 6528 General Positioning Actuator

This actuator was specifically designed to handle heavy duty positioning functions. It has some very unique features not found in any other actuators.

First of all, it incorporates a manual override which allows the operator to position the unit manually. Secondly, it has an electro mechanical clutch arrangement which allows for spring centering or returning the mechanism to a neutral start position in case of power failure. The most important part, however, is that the unit has a resilient driven output shaft. This means that when the input shaft (motor driven side) gets ahead of the output shaft, the motor will actually stop and wait until the resilient link has caught up with the input side.

There are three different springs available for the resilient link;
100% spring which produces 600 in-lbs;
75% spring which produces 450 in-lb ;
50% spring which produces 300 in-lb.

A potentiometer is also provided to give feed back to equipment such as pitch indicators, throttle, gear boxes, etc. All the castings and hardware are constructed either in bronze or stainless steel.

NOTE: For items that need accurate positioning, a push pull cable is not recommended because of the lost motion in using push pull cables. A solid rod with rod ball ends is recommended.

Ordering Options

6528- C = Clutch
P = Pitch
T = Throttle
S = Spring return
B = Cable bracket

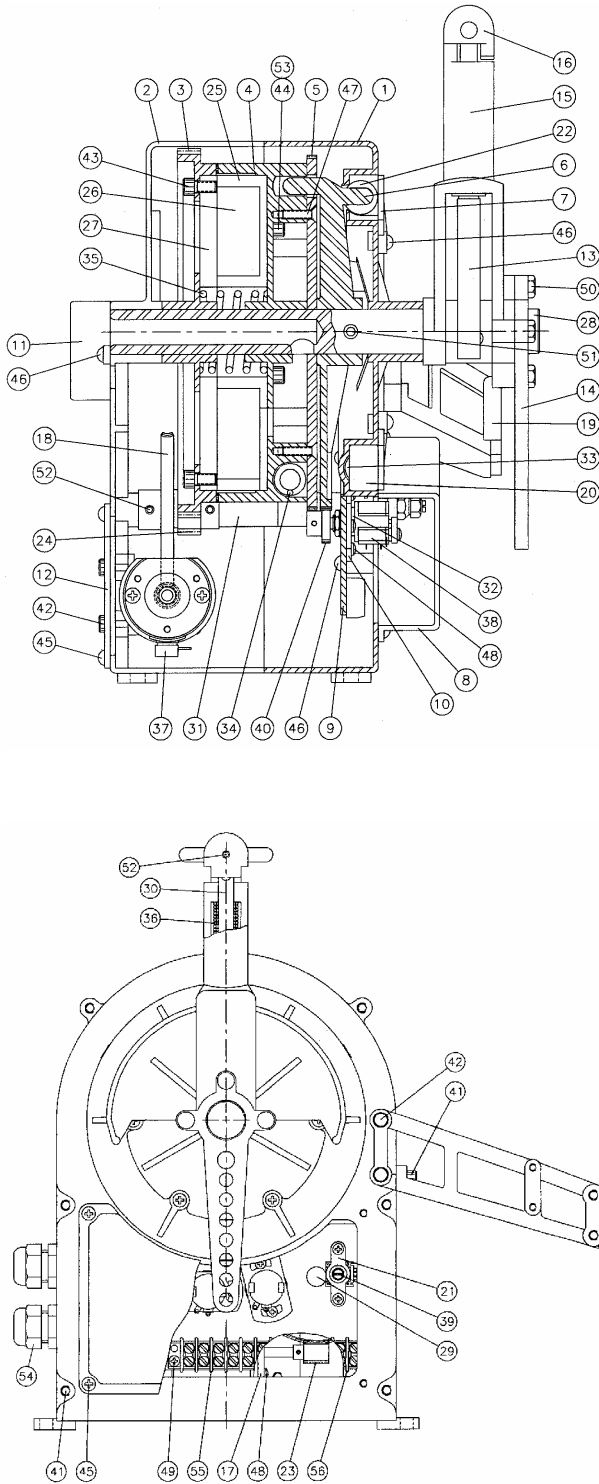
Resilient link spring strength
1 = 100% spring
2 = 75% spring
3 = 50% spring

Example: 6528-CS3 is for a 6528 clutch positioning unit with spring return feature and a 50% resilient link spring.

Weight: 50 lb (23 kg)

Patent # 5848369

Model 6528 Parts List



Item	Qty	Part Number	Description
1	1	6528-0001	Front Housing
2	1	6528-0002	Rear Housing
3	1	6528-0003	Main Drive Gear
4	1	6528-0004	Coil Housing Retainer
5	1	6528-0005	Primary Feedback Gear
6	1	6528-0006	Secondary Feedback Gear
7	1	6528-0007	Spring Cover
8	1	6528-0008	Front Cover Housing
9	1	6528-0009	Potentiometer Bracket
10	3	6528-0010	Potentiometer Adjusting Bracket
11	1	6528-0011	Main Shaft Cover
12	1	6528-0012	Rear Cover Plate
13	1	6528-0013	Drive Cam
14	1	6528-0014	Output Lever
15	1	6528-0015	Disconnect Arm
16	1	6528-0016	Knob
17	1	6528-0017	Motor Mounting Bracket
18	1	6528-0018	Worm Gear
19	1	6528-0019	Push Pull Cable Bracket
20	1	6528-0020	Spring Stop
21	1*	6528-0021	Trim Pot Bracket
22	1	6528-0022	Spring Retainer
23	4	6528-0023	Worm
24	1	6528-0024	Pinion
25	1	6528-0025	Coil Housing Retainer
26	1	6528-0026	Pulling Coil
27	1	6528-0027	Pulling Plate
28	1	6528-0028	Main Shaft
29	1	6528-0029	Drive Shaft
30	1	6528-0030	Disconnect Shaft
31	1	6528-0031	Spacer
32	3	6528-0032	Washer
33	2*	1201-0214	Pitch & Gear Return Spring
33	1*	1201-0213	Throttle Return Spring
34	1*	1201-0210	100° Lost Motion Spring
34	1*	1201-0211	75° Lost Motion Spring
34	1*	1201-0212	50° Lost Motion Spring
35	1	1201-0215	Separator Spring
36	1	1201-0146	Disconnect Arm Spring
37	1	Motor-14202	Motor 14202E167 24V Pitman
38	3	POT-4	Potentiometer – 5K, 3 turns
39	1	6002-4000	Trim Pot – 1K
40	3	YPB 3226	Potentiometer Gear
41	7	1002-1010	Socket Hd Cap Screw
42	4	1002-1012	Socket Hd Cap Screw
43	6	1002-1008	Socket Hd Cap Screw
44	4	1002-1006	Socket Hd Cap Screw
45	8	1010-0806	Round Hd Philips Machine Screw
46	12	1010-0808	Round Hd Philips Machine Screw
47	8	1009-0808	Flat Hd Machine Screw
48	10	1012-0604	Pan Hd Philips Machine Screw
49	8	1012-0606	Pan Hd Philips Machine Screw
50	4	1001-1010	Hex Hd Machine Screw
51	2	1024-1124	Spring Pin
52	3	1024-0516	Spring Pin
53	4	1023-0410	Lock Washer
54	2	6001-0249	Connecting Gland
55	1	6009-0006	Terminal Block
56	2	6009-0004	Terminal Block