

# LINEAR ACTUATORS

## SPA, SPB & SPD Series

<b>CAPACITY:</b>	250 - 2000 lbs (1112 - 8900 N)	
<b>SPEED:</b>	0.45 - 1.4 in/s (11.4 - 35 mm/s)	
<b>VOLTAGE:</b>	12, 24 115, 220 230, 460	VDC Single-phase VAC Three-phase VAC
<b>TEMPERATURE RANGE:</b>	25°F to 120°F (-4°C to 50°C)	
<b>ENVIRONMENTAL RATING:</b>	IP50 protection (IP52 Optional)	

Low temperature grease available please consult the factory

### FEATURES & BENEFITS

- Wide range of capacities and voltages for integration into a variety of applications
- Heavy duty design for long life in tough environments
- Corrosion resistant housing
- Precise and repeatable positioning with internal, adjustable limit switches
- Automatic reset thermal overload motor protection
- Mechanical braking system to reduce back driving and stopping distance
- Custom solutions available with experienced Application Engineering Team

### OPTIONS

- Stainless steel construction
- Potentiometer for precise position feedback
- Standard double clevis mounting with options for trunnion, and threaded ends
- Weather resistant sealant for IP52 rating
- Bellows boot protection
- Load limiting friction disc clutch



SPA



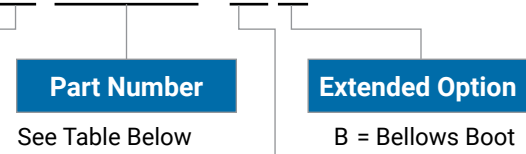
SPB



SPD

## CATALOG NUMBER CONFIGURATION KEY

**X SPX XXXX - XX X**



### Options

- H = High Speed Motor
- P = Potentiometer
- L = Limit Switch
- W = IP52 Rating
- T = Threaded End
- R = Trunnion Mount

### Part Number

- 3 = 3 inch
- 6 = 6 inch
- 12 = 12 inch
- 18 = 18 inch
- 24 = 24 inch
- 30 = 30 inch
- 36 = 36 inch

### Available Options

Series	High Speed Motor	Potentiometer	Adjustable Limit Switch	IP52 Rating	Threaded End	Trunnion Mount
SPD	–	Optional	Optional	Optional	Optional	Optional
SPB	Optional	–	–	Optional	Optional	–
SPA	–	Optional	Included	Optional	Optional	Optional

Potentiometer not available on clutch models

**Example:** SPD3405-12B = SPD series, # from table below, 12 inch stroke, Bellows Boot

## PART NUMBERS and PRODUCT SPECIFICATIONS

Part Number	Series	Voltage	Dynamic Rated Load	Max Stroke Length	Speed at Rated Load	Current Draw at Rated Load	Temperature Range	Restraining Torque	Duty Cycle at Rated Load	Screw Type	Capacitor	Clutch	Limit Switches
#	Prefix	V (Hz)	lbs (N)	in (mm)	in/s (mm/s)	A	°F (°C)	in-lbs (Nm)	%		Part No.*** (Required Capacitance)		
SPD 6414	SPD	24 VDC	1500 (6672)	24 (610)	0.45 (11.4)	14	25 to 120 (-4 to 50)	215 (24.2)	27	ACME	–	Optional**	Optional
SPD 6415		12 VDC	1500 (6672)	24 (610)	0.45 (11.4)	27	25 to 120 (-4 to 50)	215 (24.2)	27	ACME	–	Optional**	Optional
SPD 6420		12 VDC	2000 (8900)	36 (915)	0.45 (11.4)	27	25 to 120 (-4 to 50)	180 (20.3)	27	BALL	–	Optional	Optional
SPB 3405	SPB	115 VAC (60 Hz)	250 (1112)	18 (457)	0.7 (18)	1.9	25 to 120 (-4 to 50)	60 (6.7)	24	ACME	SK6405-7-1 (28-33 MFD)	Optional	–
HSPB 3405		115 VAC (60 Hz)	250 (1112)	18 (457)	1.4 (35)	5.1	25 to 120 (-4 to 50)	30 (3.4)	10	ACME	SK6405-7-3 (64-72 MFD)	Optional	–
SPB 6405		115 VAC (60 Hz)	500 (2224)	18 (457)	0.58 (15)	2.1	25 to 120 (-4 to 50)	60 (6.7)	23	ACME	SK6405-7-1 (28-33 MFD)	Optional	–
HSPB 6405		115 VAC (60 Hz)	500 (2224)	18 (457)	1.3 (33)	5.5	25 to 120 (-4 to 50)	30 (3.4)	11	ACME	SK6405-7-3 (64-72 MFD)	Optional	–
SPA 6415*	SPA	115 VAC (60 Hz)	1500 (6672)	36 (915)	0.83 (21)	6.5	25 to 120 (-4 to 50)	215 (24.2)	17	ACME	Included	–	Included
SPA 6420		115 VAC (60 Hz)	2000 (8900)	24 (610)	0.86 (22)	5.1	25 to 120 (-4 to 50)	180 (20.3)	17	BALL	Included	–	Included
SPB 4405	SPB	220 VAC (50 Hz)	250 (1112)	18 (457)	0.6 (15)	1	25 to 120 (-4 to 50)	60 (6.7)	22	ACME	SK6405-7-10 (10 MFD)	Optional	–
SPB 7405		220 VAC (50 Hz)	500 (2224)	18 (457)	0.51 (13)	1	25 to 120 (-4 to 50)	60 (6.7)	24	ACME	SK6405-7-10 (10 MFD)	Optional	–
SPA 7415*	SPA	220 VAC (50 Hz)	1500 (6672)	36 (915)	0.68 (17)	2	25 to 120 (-4 to 50)	215 (24.2)	17	ACME	Included	–	Included
SPA 7420		220 VAC (50 Hz)	2000 (8900)	24 (610)	0.68 (17)	2	25 to 120 (-4 to 50)	180 (20.3)	17	BALL	Included	–	Included
SPA 2415*	SPA	230 VAC (60 Hz) Three-Phase	1500 (6672)	36 (915)	0.83 (21)	1.6	25 to 120 (-4 to 50)	215 (24.2)	33	ACME	Included	–	Included
SPA 4415*		460 VAC (60 Hz) Three-Phase	1500 (6672)	36 (915)	0.83 (21)	0.8	25 to 120 (-4 to 50)	215 (24.2)	33	ACME	Included	–	Included

SPD models have choice of either clutch or limit switch.

\* 30 and 36 inch models only: if potentiometer option is selected, unit will not include limit switches.

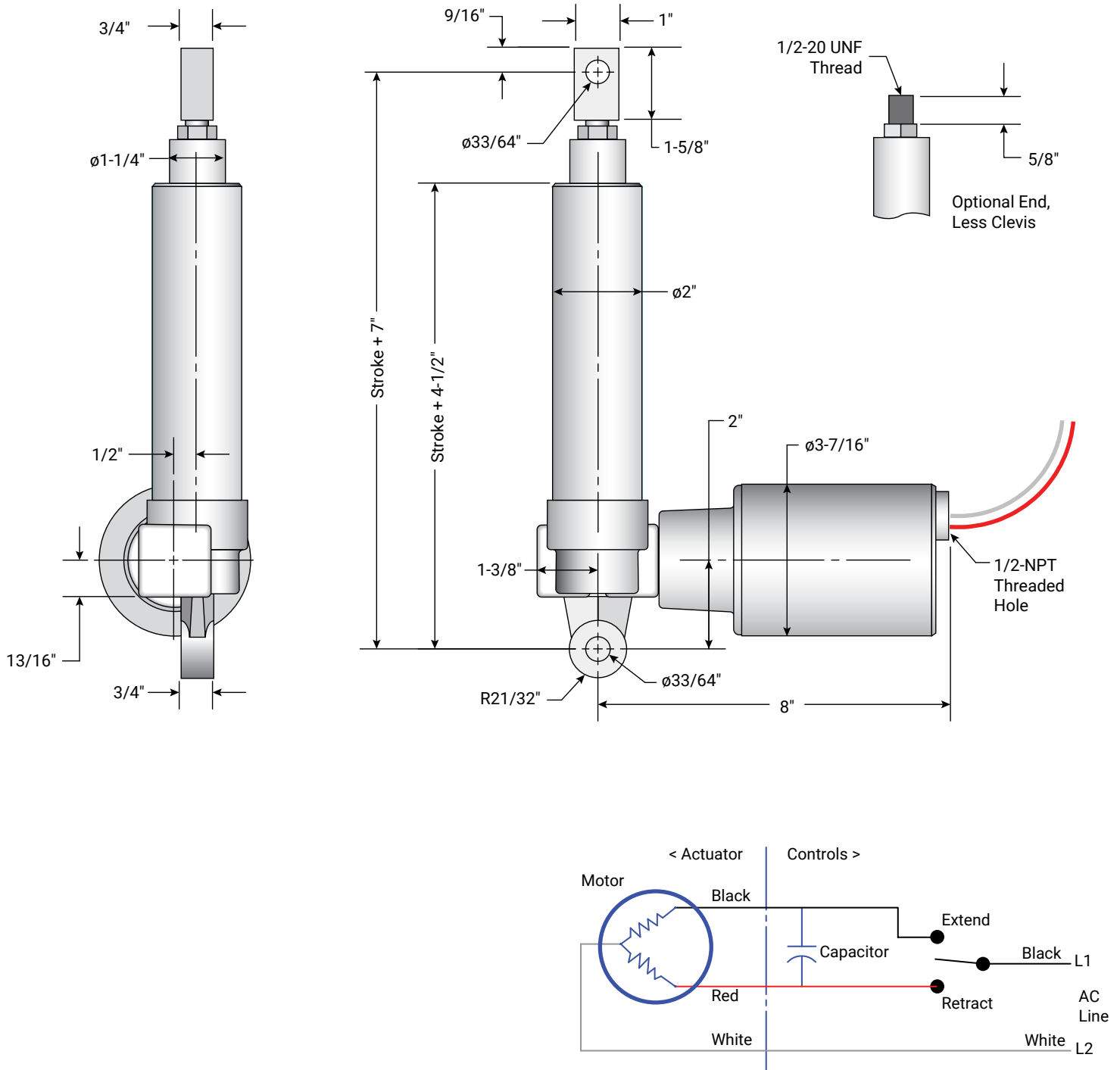
\*\* Clutch models are available upon request.

\*\*\* A capacitor is required for all AC motors. Capacitor sold separately.



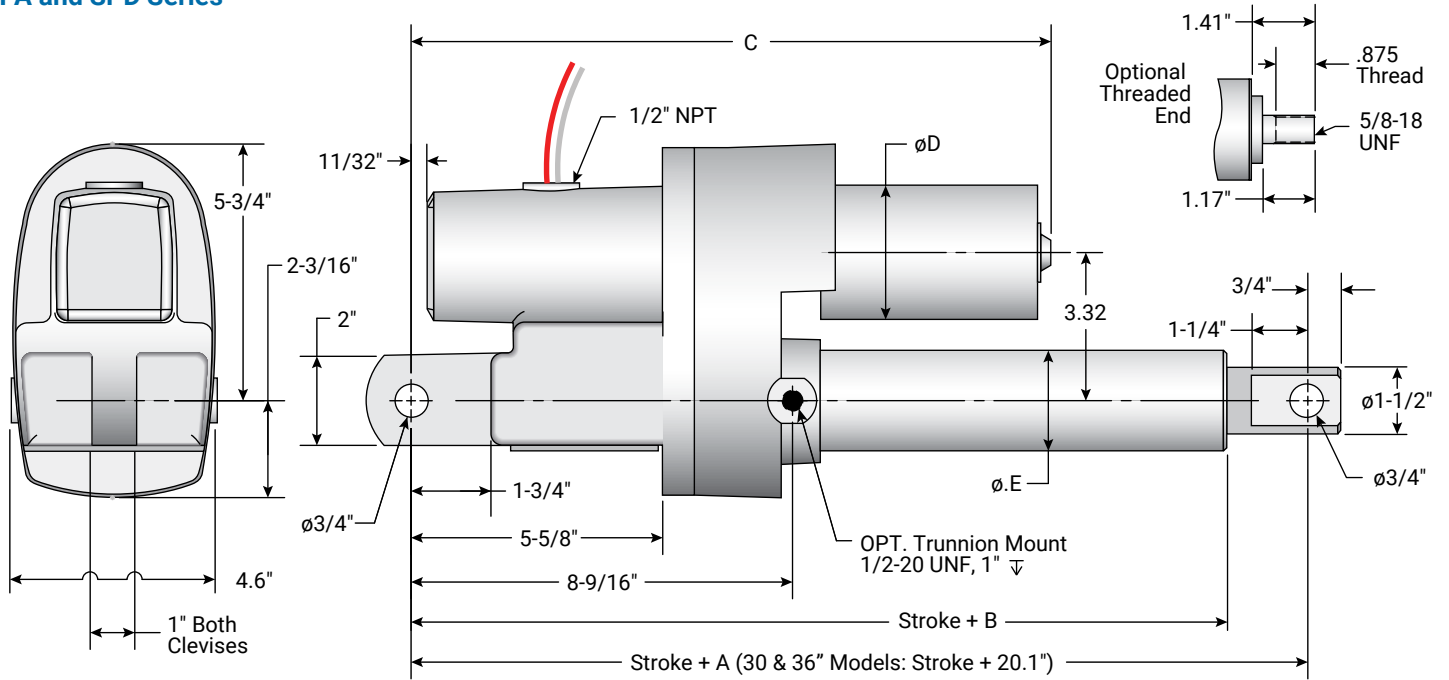
## DIMENSIONAL DRAWINGS and WIRING DIAGRAMS

### HSPB and SPB Series



## DIMENSIONAL DRAWINGS and WIRING DIAGRAMS - CONT.

### SPA and SPD Series

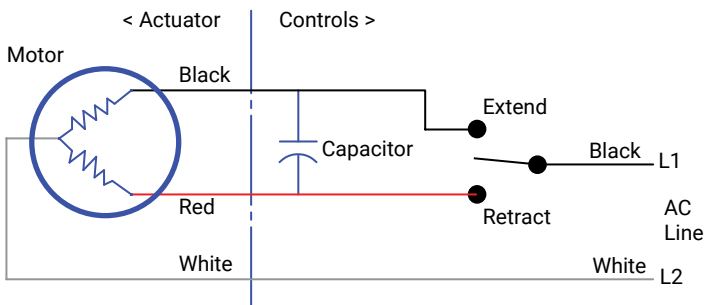


Series	A	B	C	D	E
SPD 1500 lbf	14.1"	12.3"	14.375"	3.0"	2-1/4"
SPA 1500 lbf	14.1"	12.3"	15.75"	3.8125"	2-1/4"
SPA 2000 lbf	18.9"	16.8"	15.75"	3.8125"	2-3/4"

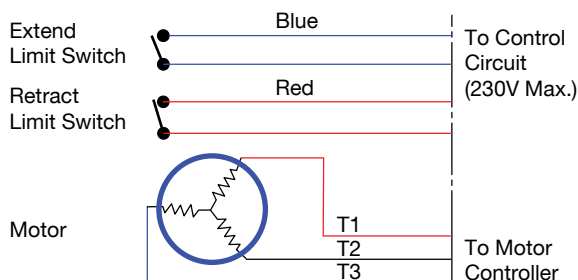
\* 30" and 36" Models: 20.1"

### SPA Series

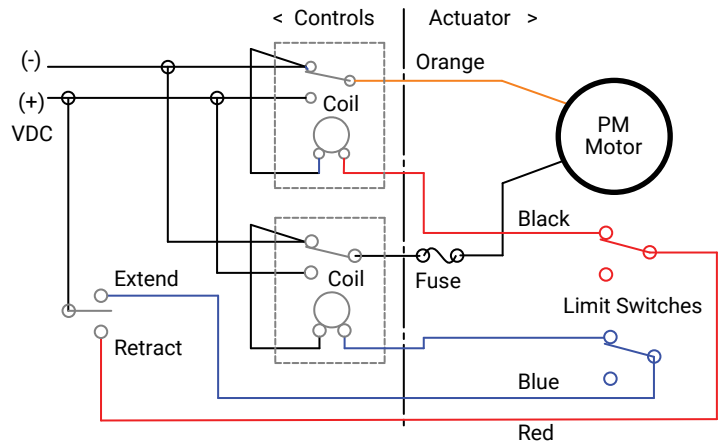
#### Single-Phase



#### Three-Phase



### SPD Series



Note: 2 relays are required for DC limit switch models