



















# LINEAR ACTUATOR

## QUICK REFERENCE

### FOR SELECTING A LINEAR ACTUATOR

|  | Series              | Page # | Capacity                        | Voltages  | Standard Stroke Lengths   | Maximum Speed at Rated Load    | Load Limiting Clutch                                  | Limit Switches      | Feedback               |  | Current Draw at Rated Load                          | Duty Cycle at Rated Load                 | Motor Overload Protection   | Environment                    | Temperature Range              | Restraining Torque   | Translating Tube Material          | Options  |
|--|---------------------|--------|---------------------------------|---|---|--------------------------------|---|---------------------|------------------------|--|---|--|-----------------------------|--------------------------------|--------------------------------|----------------------|------------------------------------|--|
|    | LT                  | 10-11  | 27 to 225 lb (120 to 1000 N)    | 12 VDC or 24 VDC  | 1 to 12 in (25 to 300 mm)   | Up to 1.3 in/s (Up to 33 mm/s) | N/A   | Fixed               | Optional               |  | Up to 3.5 A (12 VDC)<br>Up to 2.0 A (24 VDC)        | 20%                                      | N/A                         | IP66                           | -13°F to 150°F (-25°C to 65°C) | Keyed                | Polished Aluminum                  | Stainless Steel Translating Tube<br>Third Limit Switch               |
|    | LS                  | 12-15  | 450 to 675 lb (2000 to 3000 N)  | 12 VDC or 115 VAC   | 4, 8, 12, 24 in (101, 203, 304, 608 mm)                               | Up to 0.26 in/s (6.6 mm/s)     | N/A   | Adjustable          | N/A                    |  | 10 A (12 VDC)<br>1.6 A (115 VAC)                    | 17%                                      | AC motor thermal protection | N/A                            | 32°F to 110°F (0°C to 43°C)    | N/A                  | Plated Steel                       | N/A  |
|    | TMD01               | 16-17  | 100 lb (444 N)                  | 12 VDC or 24 VDC  | 2, 4, 6, 8, 10, 12 in (50, 101, 152, 203, 254, 304 mm)                | Up to 1 in/s (25.4 mm/s)       | N/A   | Optional            | Optional               |  | 7 A (12 VDC)<br>5 A (24 VDC)                        | 25%                                      | N/A                         | IP50                           | -20°F to 120°F (-28°C to 48°C) | Keyed                | Stainless Steel                    | Adjustable Limit Switches<br>Pulse Generator Feedback                |
|    | TMD02               | 18-19  | 250 lb (1112 N)                 | 12 VDC or 24 VDC  | 2, 4, 6, 8, 10, 12 in (50, 101, 152, 203, 254, 304 mm)                | Up to 0.75 in/s (19 mm/s)      | N/A   | Optional            | Optional               |  | 7 A (12 VDC)<br>5 A (24 VDC)                        | 25%                                      | N/A                         | IP50                           | -20°F to 120°F (-28°C to 48°C) | Keyed                | Stainless Steel                    | Adjustable Limit Switches<br>Pulse Generator Feedback                |
|    | HMPD w/Clutch       | 20-21  | 250 lb (1112 N)                 | 12 VDC or 24 VDC  | 3, 6, 12, 18 in (76, 152, 304, 457 mm)                                | Up to 2 in/s (50 mm/s)         | Yes   | N/A                 | N/A                    |  | Up to 28 A  | Up to 35%                                | Yes                         | IP50 standard<br>IP52 optional | -20°F to 120°F (-28°C to 48°C) | 30 in-lbf (3.4 Nm)   | Steel<br>Zinc Chromate Plated      | Weather Sealant<br>Bellows Boot                                      |
|    | HMPD w/Limit Switch | 22-23  | 250 lb (1112 N)                 | 12 VDC or 24 VDC  | 3, 6, 12, 18 in (76, 152, 304, 457 mm)                                | Up to 2 in/s (50 mm/s)         | N/A   | Adjustable          | Optional               |  | Up to 28 A  | Up to 32%                                | Yes                         | IP50 standard<br>IP52 optional | -20°F to 120°F (-28°C to 48°C) | 30 in-lbf (3.4 Nm)   | Steel<br>Zinc Chromate Plated      | Potentiometer<br>Weather Resistant<br>Bellows Boot                   |
|    | HMPB                | 24-25  | 250 lb (1112 N)                 | 115 VAC (60 Hz) or 220 VAC (50 Hz)                        | 3, 6, 12, 18 in (76, 152, 304, 457 mm)                                | Up to 1.4 in/s (35.5 mm/s)     | N/A   | Adjustable          | Optional               |  | Up to 5.0 A   | Up to 23%                                | Yes                         | IP50 standard<br>IP52 optional | -20°F to 120°F (-28°C to 48°C) | 30 in-lbf (3.4 Nm)   | Steel<br>Zinc Chromate Plated      | Potentiometer, Capacitor<br>Weather Resistant<br>Capacitor Enclosure |
|   | HSPB                | 26-27  | 250 lb (1112 N)                 | 115 VAC (60 Hz) or 220 VAC (50 Hz)                        | 3, 6, 12, 18 in (76, 152, 304, 457 mm)                                | Up to 1/4 in/s (35.5 mm/s)     | Yes   | N/A                 | N/A                    |  | Up to 5.1 A   | Up to 24%                                | Yes                         | IP50 standard<br>IP52 optional | -20°F to 120°F (-28°C to 48°C) | 30 in-lbf (3.4 Nm)   | Steel<br>Zinc Chromate Plated      | Capacitor<br>Weather Resistant<br>Capacitor Enclosure                |
|  | MPD                 | 28-29  | 500 lb (2224 N)                 | 12 VDC or 24 VDC  | 3, 6, 12, 18 in (76, 152, 304, 457 mm)                                | Up to 0.85 in/s (21.5 mm/s)    | Available upon request                                | Adjustable          | Optional               |  | 23 A (12 VDC) or 12 A (24 VDC)                      | Up to 19%                                | Yes                         | IP50 standard<br>IP52 optional | -20°F to 120°F (-28°C to 48°C) | 60 in-lbf (6.7 Nm)   | Steel<br>Zinc Chromate Plated      | Potentiometer<br>Weather Resistant<br>Bellows Boot                   |
|  | HMPB                | 30-31  | 500 lb (2224 N)                 | 115 VAC (60 Hz) or 220 VAC (50 Hz)                        | 3, 6, 12, 18 in (76, 152, 304, 457 mm)                                | Up to 1.33 in/s (33.7 mm/s)    | No  | Adjustable          | Optional               |  | Up to 5.5 A   | Up to 22%                                | Yes                         | IP50 standard<br>IP52 optional | -20°F to 120°F (-28°C to 48°C) | 60 in-lbf (6.7 Nm)   | Steel<br>Zinc Chromate Plated      | Potentiometer<br>Weather Resistant<br>Bellows Boot                   |
|  | SPB                 | 32-33  | 500 lb (2224 N)                 | 115 VAC (60 Hz) or 220 VAC (50 Hz)                        | 3, 6, 12, 18 in (76, 152, 304, 457 mm)                                | Up to 1.3 in/s (33.0 mm/s)     | Yes   | N/A                 | N/A                    |  | Up to 5.5 A   | Up to 24%                                | Yes                         | IP50 standard<br>IP52 optional | -20°F to 120°F (-28°C to 48°C) | 60 in-lbf (6.7 Nm)   | Steel<br>Zinc Chromate Plated      | Weather Resistant<br>Capacitor<br>Capacitor Enclosure                |
|  | TAC                 | 34-35  | 500 lb (2224 N)                 | 12 VDC or 24 VDC  | 4, 6, 12, 18 in (102, 152, 304, 457 mm)                               | Up to 0.45 in/s (11.4 mm/s)    | Yes   | N/A                 | N/A                    |  | 10 A (12 VDC) or 5 A (24 VDC)                       | 40%                                      | Yes                         | IP50                           | -20°F to 120°F (-28°C to 48°C) | 40 in-lbf (4.5 Nm)   | Stainless Steel                    | Bellows Boot   |
|  | XLT                 | 36-37  | 340 to 1015 lb (1512 to 4515 N) | 12 VDC or 24 VDC  | 2, 4, 8, 10, 12 in (50, 100, 150, 200, 250, 300 mm)                   | Up to 1.89 in/s (48 mm/s)      | Yes   | Fixed               | Optional               |  | DC models: up to 25 A<br>AC models: up to 2.5 A     | 20%                                      | N/A                         | IP66                           | -13°F to 150°F (-25°C to 65°C) | Keyed                | Polished Aluminum                  | Stainless Steel<br>Translating Tube                                  |
|  | TAL                 | 38-39  | 1000 lb (4448 N)                | 115 VAC (60 Hz) or 220/230 VAC (50 Hz/60 Hz)              | 4, 8, 12, 18 in (101, 203, 304, 407 mm)                               | Up to 0.45 in/s (11.4 mm/s)    | No  | Adjustable          | Optional               |  | 4 A (115 VAC) or 2.0/2.5 A (220/230 VAC)            | 17.5% (115 VAC) or 17%/14% (220/230 VAC) | Yes                         | IP50                           | -20°F to 120°F (-28°C to 48°C) | 80 in-lbf (9 Nm)     | Stainless Steel                    | Bellows Boot   |
|  | SPD                 | 40-41  | 1500 lb (6672 N)                | 12 VDC  | 3, 6, 12, 18, 24, 30, 36 in (76, 152, 304, 457, 608, 762, 915 mm)     | 0.43 in/s (10.9 mm/s)          | Available upon request                                | Optional            | Optional               |  | 27 A  | 27%                                      | Yes                         | IP50 standard<br>IP52 optional | -15°F to 120°F (-10°C to 48°C) | 215 in-lbf (24.2 Nm) | Steel<br>Zinc Chromate Plated      | Potentiometer<br>Bellows Boot<br>Weather Resistant                   |
|  | SPA                 | 42-43  | 1500 lb (6672 N)                | 115 VAC (60 Hz) or 220 VAC (50 Hz)                        | 3, 6, 12, 18, 24, 30, 36 in (76, 152, 304, 457, 608, 762, 915 mm)     | Up to 0.83 in/s (21.0 mm/s)    | N/A   | Adjustable          | Optional               |  | Up to 6.5 A (115 VAC)<br>Up to 2 A (220 VAC, 50 Hz) | Up to 25%                                | Yes                         | IP50 standard<br>IP52 optional | 15°F to 120°F (-9°C to 48°C)   | 215 in-lbf (24.2 Nm) | Steel<br>Zinc Chromate Plated      | Potentiometer<br>Bellows Boot<br>Weather Resistant                   |
|  | SPA                 | 44-45  | 2000 lb (8896 N)                | 115 VAC (60 Hz) or 220 VAC (50 Hz)                        | 3, 6, 12, 18, 24 in (76, 152, 304, 457, 608 mm)                       | Up to 0.86 in/s (21.8 mm/s)    | N/A   | Adjustable          | Optional               |  | Up to 5.1 A   | Up to 25%                                | Yes                         | IP50 standard<br>IP52 optional | 15°F to 120°F (-9°C to 48°C)   | 180 in-lbf (20.3 Nm) | Steel<br>Zinc Chromate Plated      | Potentiometer<br>Bellows Boot<br>Weather Resistant                   |
|  | CMLA                | 46-53  | 500 to 2000 lb (2224 to 8896 N) | 115 VAC (60 Hz), 230 VAC (60 Hz) or 230/460 VAC/60 Hz/3ph | 3.9, 5.9, 11.9, 17.7, 23.6, 29.5 in (100, 150, 300, 450, 600, 750 mm) | Up to 0.8 in/s (203 mm/s)      | Yes (not available on 1000 lb quad speed 2.1:1 ratio) | Optional Adjustable | Optional Potentiometer |  | Up to 8.3 A   | Up to 16,000 in/hr (406 m/hr)            | Yes                         | IP66S                          | 4°F to 150°F (-20°C to 65°C)   | Keyed                | Hardened Chrome<br>Stainless Steel | Potentiometer<br>Adjustable Limit Switches                           |