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Ordering Keys

How to Order

When ordering a Thomson precision linear actuator, it is necessary to first make sure that the proper sizing and selection has been done. The demand on your system will impact your choice of stroke length, profile size, belt or screw drive, environmental protection demands, etc.

The load and speed demand will tell you the configuration of gearboxes, drive shafts and motor attachment accessories that are necessary. You will also need to evaluate what accessories and options are necessary.

Thomson will assist you in the sizing and selection work and determining of part numbers, but it is important that you are aware of the demands of your specific application in order to enable us to supply you with the correct unit.

On the following pages you will find the ordering keys for the different T and ECT Series precision linear actuators shown in earlier pages. These keys are self-explanatory and by following the examples, you can quickly and easily learn about the different options and versions available. Please also visit www.thomsonlinear.com where you can find information and CAD drawings that make the selection, ordering and design process much easier. Please contact us for further support.

Precision Linear Actuators

Ordering Keys

T60, T90 and T130

T60, T90 and T130

1	2	3	4	5	6	7	8	9
T09	LX	GB8	B	3210	-00750	X	R	XX

1. Type of unit
T06 = T60 unit
T09 = T90 unit
T13 = T130 unit

2. Transmission type
LX = inline style, directly coupled, RediMount flange
SX = inline style, directly coupled, no RediMount flange

3. RediMount motor ID code
XXX = for units without RediMount flange
vvw = alphanumeric motor code for suitable RediMount flange when
         motor is known[?]
999 = code used when motor is unknown

4. Drive shaft type
B = standard (for SX units with standard shaft and all LX units)
G = shaft for SB030 worm gear (only possible on T06SXXXXx25xx units)
H = shaft for SB040 worm gear (only possible on T06SXXXXx25xx and
       T09SXXXXx25xx units)
K = shaft for SB075 worm gear (only possible on T13SXXXXx5010 units)
L = shaft for SB050 (only possible on T09SXXXXx32xx) and SB063 (only
       possible on T09SXXXXx32xx and T13SXXXXx40xx)

5. Screw type, diameter, lead
2505 = ballscrew, 25 mm, 5 mm (only possible for T06 and T09 units)
2510 = ballscrew, 25 mm, 10 mm (only possible for T06 and T09 units)
2525 = ballscrew, 25 mm, 25 mm (only possible for T06 and T09 units)
2550 = ballscrew, 25 mm, 50 mm (only possible for T06 units)
3210 = ballscrew, 32 mm, 10 mm (only possible for T09 units)
3220 = ballscrew, 32 mm, 20 mm (only possible for T09 units)
3232 = ballscrew, 32 mm, 32 mm (only possible for T09 units)
4010 = ballscrew, 40 mm, 10 mm (only possible for T13 units)
4020 = ballscrew, 40 mm, 20 mm (only possible for T13 units)
4040 = ballscrew, 40 mm, 40 mm (only possible for T13 units)
5010 = ballscrew, 50 mm, 10 mm (only possible for T13 units)

6. Maximum stroke (Smax)
- xxxxx = distance in mm

7. Mounting options
X = no mounting option
F = mounting feet (movable for T60 and fixed for T90 and T130)
T = trunnion
G = front mounting plate

8. Adapter options
J = spherical joint ø16 mm (only possible for T06xxxxxx25 and
       T09xxxxxx25)
K = spherical joint ø20 mm (only possible for T09xxxxxx32)
L = spherical joint ø30 mm (only possible for T13xxxxxx40)
M = spherical joint ø40 mm (only possible for T13xxxxxx50)
N = M16 × 1,5 outside thread (only possible for T06xxxxxx25 and
       T09xxxxxx25)
P = M16 × 2 inside thread (only possible for T06xxxxxx25 and
       T09xxxxxx25)
Q = M20 × 1,5 outside thread (only possible for T09xxxxxx32)
R = M20 × 1,5 inside thread (only possible for T09xxxxxx32)
S = M27 × 2 outside thread (only possible for T13xxxxxx40)
T = M27 × 2 inside thread (only possible for T13xxxxxx40)
U = M33 × 2 outside thread (only possible for T13xxxxxx40 and
       T13xxxxxx50)
V = M33 × 2 inside thread (only possible for T13xxxxxx40 and
       T13xxxxxx50)
X = M30 × 2 inside thread (only possible for T13xxxxxx40)

9. Protection option
XX = standard
S1 = wash down protection

[1] See below for the definition of drive flange type.

With RediMount (LX)   Without RediMount (SX)

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Ordering Keys

ECT90

ECT90 - Parallel IEC90 AC Motor

1	2	3	4	5	6	7	8
ECT09-I	09B02PB2510	-1500	X	J	0	2	XX

1. Model and motor type
ECT09-I = ECT90 with IEC90 three phase AC motor

2. Max. load, speed, gear type, brake and motor style
09B03PB2510 = 9750 N, 160 mm/s, belt gear, brake, parallel [1]
09B02PB2510 = 6500 N, 240 mm/s, belt gear, brake, parallel [1]
09B03PB3220 = 4800 N, 320 mm/s, belt gear, brake, parallel [2]
09B02PB3220 = 3100 N, 480 mm/s, belt gear, brake, parallel [2]
09B01PB3220 = 1600 N, 960 mm/s, belt gear, brake, parallel [2]
09B01PB3232 = 900 N, 1520 mm/s, belt gear, brake, parallel [2]

3. Stroke (S max)
- xxxx = distance in mm

4. Mounting options
X = no mounting option
S = clevis
F = mounting feet
T = trunnion
G = front mounting plate

5. Adapter options
J = spherical joint ø16 mm
K = spherical joint ø20 mm
N = outside thread M16 × 1,5
P = inside thread M16 × 2
Q = outside thread M20 × 1,5
R = inside thread M20 × 1,5

6. Magnetic sensors N.C [3]
y = number of normally closed sensors (0 - 9)

7. Magnetic sensors N.O [3]
z = number of normally open sensors (0 - 9)

8. Protection options [4]
XX = standard
S1 = wash down protection

[1] These models are only compatible with adapter options J, N and P.

[2] These models are only compatible with adapter options K, Q and R.

[3] The sensors are shipped unmounted with the unit.

[4] See page 73 for more information.

ECT90 - Parallel B43 or B53 AC Servo Motor

1	2	3	4	5	6	7	8
ECT09-B	53R03PB3220	-1340	S	Q	3	0	S1

1. Model and motor type
ECT09-B = ECT90 with AC servo motor

2. Max. load, speed, gear type, brake and motor style
53R03PB2510 = 9800 N, 220 mm/s, belt gear, no brake, parallel [1]
53R02PB2510 = 8000 N, 330 mm/s, belt gear, no brake, parallel [1]
53R03PB3220 = 5900 N, 440 mm/s, belt gear, no brake, parallel [2]
43R03PB2510 = 5800 N, 140 mm/s, belt gear, no brake, parallel [1]
53R02PB3220 = 3900 N, 670 mm/s, belt gear, no brake, parallel [2]
43R02PB2510 = 3800 N, 210 mm/s, belt gear, no brake, parallel [1]
43R03PB3220 = 2800 N, 270 mm/s, belt gear, no brake, parallel [2]
43R02PB3220 = 1800 N, 420 mm/s, belt gear, no brake, parallel [2]
53S03PB2510 = 9800 N, 220 mm/s, belt gear, brake, parallel [1]
53S02PB2510 = 8000 N, 330 mm/s, belt gear, brake, parallel [1]
53S03PB3220 = 5900 N, 440 mm/s, belt gear, brake, parallel [2]
43S03PB2510 = 5800 N, 140 mm/s, belt gear, brake, parallel [1]
53S02PB3220 = 3900 N, 670 mm/s, belt gear, brake, parallel [2]
43S02PB2510 = 3800 N, 210 mm/s, belt gear, brake, parallel [1]
43S03PB3220 = 2800 N, 270 mm/s, belt gear, brake, parallel [2]
43S02PB3220 = 1800 N, 420 mm/s, belt gear, brake, parallel [2]

3. Stroke (S max)
- xxxx = distance in mm

4. Mounting options
X = no mounting option
S = clevis
F = mounting feet
T = trunnion
G = front mounting plate

5. Adapter options
J = spherical joint ø16 mm
K = spherical joint ø20 mm
N = outside thread M16 × 1,5
P = inside thread M16 × 2
Q = outside thread M20 × 1,5
R = inside thread M20 × 1,5

6. Magnetic sensors N.C [3]
y = number of normally closed sensors (0 - 9)

7. Magnetic sensors N.O [3]
z = number of normally open sensors (0 - 9)

8. Protection options [4]
XX = standard
S1 = wash down protection

[1] These models are only compatible with adapter options J, N and P.

[2] These models are only compatible with adapter options K, Q and R.

[3] The sensors are shipped unmounted with the unit.

[4] See page 73 for more information.

Precision Linear Actuators

Ordering Keys

ECT90

ECT90 - Direct Drive, Inline B43 or B53 AC Servo Motor

1	2	3	4	5	6	7	8
ECT09-B	53R01LD2510	-0800	T	P	0	0	S1

1. Model and motor type
ECT09-B = ECT90 with AC servo motor

2. Max. load, speed, gear type, brake and motor style
53R01LD2510 = 5300 N, 450 mm/s, direct drive, no brake, inline [1]
53R01LD3220 = 2600 N, 1000 mm/s, direct drive, no brake, inline [2]
43R01LD2510 = 2000 N, 410 mm/s, direct drive, no brake, inline [1]
53R01LD3232 = 1500 N, 1600 mm/s, direct drive, no brake, inline [2]
43R01LD3220 = 900 N, 820 mm/s, direct drive, no brake, inline [2]
53S01LD2510 = 5300 N, 450 mm/s, direct drive, brake, inline [1]
53S01LD3220 = 2600 N, 1000 mm/s, direct drive, brake, inline [2]
43S01LD2510 = 2000 N, 410 mm/s, direct drive, brake, inline [1]
53S01LD3232 = 1500 N, 1600 mm/s, direct drive, brake, inline [2]
43S01LD3220 = 900 N, 820 mm/s, direct drive, brake, inline [2]

3. Stroke (S max)
- xxxx = distance in mm

4. Mounting options
X = no mounting option
F = mounting feet
T = trunnion
G = front mounting plate

5. Adapter options
J = spherical joint ø16 mm
K = spherical joint ø20 mm
N = outside thread M16 × 1,5
P = inside thread M16 × 2
Q = outside thread M20 × 1,5
R = inside thread M20 × 1,5

6. Magnetic sensors N.C [3]
y = number of normally closed sensors (0 - 9)

7. Magnetic sensors N.O [3]
z = number of normally open sensors (0 - 9)

8. Protection options [4]
XX = standard
S1 = wash down protection

[1] These models are only compatible with adapter options J, N and P.

[2] These models are only compatible with adapter options K, Q and R.

[3] The sensors are shipped unmounted with the unit.

[4] See page 73 for more information.

ECT90 - Planetary Gear, Inline B43 or B53 AC Servo Motor

1	2	3	4	5	6	7	8
ECT09-B	43R10LP3220	-1205	X	R	9	2	XX

1. Model and motor type
ECT09-B = ECT90 with AC servo motor

2. Max. load, speed, gear type, brake and motor style
53R10LP3220 = 20000 N, 130 mm/s, planetary gear, no brake, inline
53R05LP3220 = 13000 N, 270 mm/s, planetary gear, no brake, inline
43R10LP3220 = 10000 N, 80 mm/s, planetary gear, no brake, inline
43R05LP3220 = 5000 N, 160 mm/s, planetary gear, no brake, inline
53S10LP3220 = 20000 N, 130 mm/s, planetary gear, brake, inline
53S05LP3220 = 13000 N, 270 mm/s, planetary gear, brake, inline
43S10LP3220 = 10000 N, 80 mm/s, planetary gear, brake, inline
43S05LP3220 = 5000 N, 160 mm/s, planetary gear, brake, inline

3. Stroke (S max)
- xxxx = distance in mm

4. Mounting options
X = no mounting option
F = mounting feet
T = trunnion
G = front mounting plate

5. Adapter options
K = spherical joint ø20 mm
Q = outside thread M20 × 1,5
R = inside thread M20 × 1,5

6. Magnetic sensors N.C [1]
y = number of normally closed sensors (0 - 9)

7. Magnetic sensors N.O [1]
z = number of normally open sensors (0 - 9)

8. Protection options [2]
XX = standard
S1 = wash down protection

[1] The sensors are shipped unmounted with the unit.

[2] See page 73 for more information.

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Ordering Keys

ECT130

ECT130 - Parallel IEC100 AC Motor

1	2	3	4	5	6	7	8
ECT13-I	10B03PB4010	-1850	R	V	1	0	S1

1. Model and motor type
ECT13-I = ECT130 with IEC100 three phase AC motor

2. Max. load, speed, gear type, brake and motor style
10B03PB4010 = 13300 N, 175 mm/s, belt gear, brake, parallel
10B02PB4010 = 9400 N, 210 mm/s, belt gear, brake, parallel
10B03PB4020 = 6200 N, 300 mm/s, belt gear, brake, parallel
10B02PB4020 = 4200 N, 420 mm/s, belt gear, brake, parallel
10B01PB4020 = 1800 N, 950 mm/s, belt gear, brake, parallel
10B01PB4040 = 600 N, 1900 mm/s, belt gear, brake, parallel

3. Stroke (S max)
- xxxx = distance in mm

4. Mounting options
X = no mounting option
R = clevis
F = mounting feet
T = trunnion
G = front mounting plate

5. Adapter options
L = spherical joint ø30 mm
M = spherical joint ø40 mm
S = outside thread M27 × 2
T = inside thread M27 × 2
U = outside thread M33 × 2
V = inside thread M33 × 2
X = inside thread M30 × 2

6. Magnetic sensors N.C [1]
y = number of normally closed sensors (0 - 9)

7. Magnetic sensors N.O [1]
z = number of normally open sensors (0 - 9)

8. Protection options [2]
XX = standard
S1 = wash down protection

[1] The sensors are shipped unmounted with the unit.

[2] See page 73 for more information.

ECT130 - Parallel B53 or B63 AC Servo Motor

1	2	3	4	5	6	7	8
ECT13-B	53R02PB4020	-2000	X	U	0	0	XX

1. Model and motor type
ECT13-B = ECT130 with AC servo motor

2. Max. load, speed, gear type, brake and motor style
63R03PB4010 = 21500 N, 160 mm/s, belt gear, no brake, parallel
63R02PB4010 = 15500 N, 220 mm/s, belt gear, no brake, parallel
53R03PB4010 = 15000 N, 160 mm/s, belt gear, no brake, parallel
63R03PB4020 = 10500 N, 320 mm/s, belt gear, no brake, parallel
53R02PB4010 = 10500 N, 220 mm/s, belt gear, no brake, parallel
63R02PB4020 = 7500 N, 440 mm/s, belt gear, no brake, parallel
53R03PB4020 = 7000 N, 320 mm/s, belt gear, no brake, parallel
53R02PB4020 = 5000 N, 440 mm/s, belt gear, no brake, parallel
63S03PB4010 = 21500 N, 160 mm/s, belt gear, brake, parallel
63S02PB4010 = 15500 N, 220 mm/s, belt gear, brake, parallel
53S03PB4010 = 15000 N, 160 mm/s, belt gear, brake, parallel
63S03PB4020 = 10500 N, 320 mm/s, belt gear, brake, parallel
53S02PB4010 = 10500 N, 220 mm/s, belt gear, brake, parallel
63S02PB4020 = 7500 N, 440 mm/s, belt gear, brake, parallel
53S03PB4020 = 7000 N, 320 mm/s, belt gear, brake, parallel
53S02PB4020 = 5000 N, 440 mm/s, belt gear, brake, parallel

3. Stroke (S max)
- xxxx = distance in mm

4. Mounting options
X = no mounting option
R = clevis
F = mounting feet
T = trunnion
G = front mounting plate

5. Adapter options
L = spherical joint ø30 mm
M = spherical joint ø40 mm
S = outside thread M27 × 2
T = inside thread M27 × 2
U = outside thread M33 × 2
V = inside thread M33 × 2
X = inside thread M30 × 2

6. Magnetic sensors N.C [1]
y = number of normally closed sensors (0 - 9)

7. Magnetic sensors N.O [1]
z = number of normally open sensors (0 - 9)

8. Protection options [2]
XX = standard
S1 = wash down protection

[1] The sensors are shipped unmounted with the unit.

[2] See page 73 for more information.

Ordering Keys

ECT130

ECT130 - Direct Drive, Inline B53 or B63 AC Servo Motor

1	2	3	4	5	6	7	8
ECT13-B	53R01LD4040	-1850	X	S	1	1	S1

1. Model and motor type
ECT13-B = ECT130 with AC servo motor

2. Max. load, speed, gear type, brake and motor style
63R01LD4010 = 7400 N, 400 mm/s, direct drive, no brake, inline
53R01LD4010 = 4900 N, 400 mm/s, direct drive, no brake, inline
63R01LD4020 = 3400 N, 1000 mm/s, direct drive, no brake, inline
53R01LD4020 = 2250 N, 1000 mm/s, direct drive, no brake, inline
63R01LD4040 = 1400 N, 2000 mm/s, direct drive, no brake, inline
53R01LD4040 = 700 N, 2000 mm/s, direct drive, no brake, inline
63S01LD4010 = 7400 N, 400 mm/s, direct drive, brake, inline
53S01LD4010 = 4900 N, 400 mm/s, direct drive, brake, inline
63S01LD4020 = 3400 N, 1000 mm/s, direct drive, brake, inline
53S01LD4020 = 2250 N, 1000 mm/s, direct drive, brake, inline
63S01LD4040 = 1400 N, 2000 mm/s, direct drive, brake, inline
53S01LD4040 = 700 N, 2000 mm/s, direct drive, brake, inline

3. Stroke (S max)
- xxxx = distance in mm

4. Mounting options
X = no mounting option
F = mounting feet
T = trunnion
G = front mounting plate

5. Adapter options
L = spherical joint ø30 mm
M = spherical joint ø40 mm
S = outside thread M27 × 2
T = inside thread M27 × 2
U = outside thread M33 × 2
V = inside thread M33 × 2
X = inside thread M30 × 2

6. Magnetic sensors N.C [1]
y = number of normally closed sensors (0 - 9)

7. Magnetic sensors N.O [1]
z = number of normally open sensors (0 - 9)

8. Protection options [2]
XX = standard
S1 = wash down protection

[1] The sensors are shipped unmounted with the unit.

[2] See page 73 for more information.

ECT130 - Planetary Gear, Inline B53 or B63 AC Servo Motor

1	2	3	4	5	6	7	8
ECT13-B	63R05LP4010	-0600	F	L	0	5	XX

1. Model and motor type
ECT13-B = ECT130 with AC servo motor

2. Max. load, speed, gear type, brake and motor style
53R10LP4010 = 38000 N, 50 mm/s, planetary gear, no brake, inline
63R05LP4010 = 33000 N, 100 mm/s, planetary gear, no brake, inline
53R05LP4010 = 22500 N, 100 mm/s, planetary gear, no brake, inline
63R05LP4020 = 16000 N, 200 mm/s, planetary gear, no brake, inline
53R05LP4020 = 11000 N, 200 mm/s, planetary gear, no brake, inline
53S10LP4010 = 38000 N, 50 mm/s, planetary gear, brake, inline
63S05LP4010 = 33000 N, 100 mm/s, planetary gear, brake, inline
53S05LP4010 = 22500 N, 100 mm/s, planetary gear, brake, inline
63S05LP4020 = 16000 N, 200 mm/s, planetary gear, brake, inline
53S05LP4020 = 11000 N, 200 mm/s, planetary gear, brake, inline

3. Stroke (S max)
- xxxx = distance in mm

4. Mounting options
X = no mounting option
F = mounting feet
T = trunnion
G = front mounting plate

5. Adapter options
L = spherical joint ø30 mm
M = spherical joint ø40 mm
S = outside thread M27 × 2
T = inside thread M27 × 2
U = outside thread M33 × 2
V = inside thread M33 × 2
X = inside thread M30 × 2

6. Magnetic sensors N.C [1]
y = number of normally closed sensors (0 - 9)

7. Magnetic sensors N.O [1]
z = number of normally open sensors (0 - 9)

8. Protection options [2]
XX = standard
S1 = wash down protection

[1] The sensors are shipped unmounted with the unit.

[2] See page 73 for more information.