

 THOMSON TOLLO™

### The History of Linear Motion Systems is our History

The unmatched breadth of the Thomson linear motion system product line comes from the consolidation of three world-renowned brands: Thomson, Neff and Tollo. We are product innovators with decades of application experience. Unbiased ownership of the multiple motion system technologies enable Thomson to provide you with the optimal balance of performance versus installed cost for your application.



#### Neff Thomson Tollo

Founded in 1905, Neff offered products for the linear motion market and, over the decades, became a market leader in ball screw technology. The first linear motion system from Neff was presented in 1981 at the FAMETA show in Stuttgart.

Thomson introduced the first ball screw actuator into an aviation application in 1939 and invented the anti-friction Linear Ball Bushing® Bearing in 1945. Thomson has been a market lead with an increasing portfolio of linear motion technologies ever since.

Tollo began in 1981 as a lifting equipment manufacturer. The product line grew rapidly thereafter and, in 1982, Tollo presented their first linear motion system at the Technical Fair in Stockholm.



#### Thomson


Thomson has consolidated the most competitive and complementary products from each brand into the most advanced, most comprehensive product portfolio available today. The range covers the smallest and most compact linear motion systems to the biggest and most robust. Our wide range of guide and drive systems can be configured economically and can also work in harsh environments, at high speeds, and in high precision applications.

Thomson is linear motion, optimized.



### Product Overview

Thomson's linear motion systems are divided into seven different categories to make the selection process of a unit easier.



#### Ball screw driven - ball guided units

Units designed for high thrust, payload, precision and stiffness.

- Force up to 12000 N
- Repeatability down to 0,005mm

#### Ball screw driven - slide guided units

Low cost units for high thrust applications and demanding environments.

- Durable guide system
- Washdown protected version

#### Belt driven - ball guided units

Smooth running units for high speed, acceleration and load requiring a long lifetime.

- Speed up to 5 m/s
- Acceleration up to 40 m/s<sup>2</sup>

#### Belt driven - slide guided units

Units for applications requiring smooth travel, high speed, high acceleration and low maintenance.

- Cost efficient guide system
- Chemically protected versions

#### Belt driven - wheel guided units

Units for high speed, high acceleration, smooth motion and medium to high loads.

- Speed up to 10 m/s
- Acceleration up to 40 m/s<sup>2</sup>

#### Linear lifting systems

Linear lifting systems are often used in X-Y configurations in combination with other linear motion systems.

#### Linear rod units

Units designed for lifting applications or for the replacement of hydraulic and pneumatic cylinders.







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## Performance Overview

	Ball Screw Guides	Ball Screw Slide Guides	Belt Drive, Ball Guides
			
<b>Profile Size</b>			
Smallest unit [mm]	40 × 40	40 × 37	40 × 40
Largest Unit [mm]	240 × 85	108 × 100	240 × 85
<b>Stroke Length</b>			
Maximum stroke length [mm]	11000	6000	12000
<b>Speed</b>			
Maximum speed [m/s]	2.5	1.6	5
Maximum acceleration [m/s <sup>2</sup> ]	20	8	40
<b>Accuracy</b>			
Maximum repeatability [±mm]	0.01	0.05	0.05
<b>Load</b>			
Maximum load, Fx [N]	12000	5000	5000
Maximum load, Fy [N]	8000	3005	6400
Maximum load, Fz [N]	8000	3005	6400
Maximum load torque, Mx [Nm]	780	117	600
Maximum load torque, My [Nm]	900	279	720
Maximum load torque, Mz [Nm]	900	279	720
<b>Features</b>			
Units with double carriages	•	•	•
Units with left/right carriages	•	•	
Telescoping units			
Non driven units	•	•	•
Units with cover band	•	•	•
Wash down protected units	•	•	•
Chemically protected units			
<b>Accessories</b>			
Mounting kits	•	•	•
Gear boxes	•	•	•
Servo motors	•	•	•
Limit switch / sensor brackets	•/•	•/•	•/•
Feedback devices / brackets	•/•	•/•	•/•

Belt Drive, Slide Guides	Belt Drive, Wheel Guides	Linear Lifting Systems	Linear Rod Units
			
50 × 50	50 × 50	50 × 50	60 × 60
108 × 100	240 × 85	188 × 150	80 × 80
1200	11000	3000	500
5	10	10	1.5
40	40	40	20
0.2	0.05	0.05	0.02
1250	5000	1480	3500
3005	5000	882	3000
3005	9300	7500	3000
117	500	2000	150
279	930	2000	-
279	500	330	-
•	•	•	
		•	•
•	•		
•	•		
•	•	•	
•	•		
•	•	•	•
•	•	•	•
•	•	•	•
•/•	•/•	•/•	•/•
•/•	•/•	•/•	•/•

## Performance Overview

		Electrak 1	Electrak 1SP	Electrak 050
				
<b>General Features</b>				
Part number suffix		S	SP	DE
DC Input Voltages	Vdc	12, 24, 36	12, 24, 36	12, 24, 36
AC Input Voltages	Vac	-	-	-
Maximum Dynamic Load	N	340	340	500
Maximum Speed	mm/s	75	75	48
Maximum Stroke Length	mm	150	150	200
Restraining Torque	Nm	2.3	0	0
Protection Class		IP65	IP65	IP65
Mounting Config		clevis	clevis	clevis
Screw type		acme	acme	worm
Recommended Control		AC-247 ELS	AC-247 ELS	DCG-150
<b>Standard Features</b>				
Overload clutch				3
Motor overload protection		3	3	3
End of stroke limit switches		3		3
Potentiometer feedback			3	
Dynamic bracking				3
Manual Override				
<b>Optional Features</b>				
End of stroke limit switches				
Potentiometer feedback				3
Encoder feedback				
Programmable limit switches				
End of stroke outputs				
Low voltage power switching				
Manual Override				

Electrak 150	Electrak PPA-DC	Electrak PPA-AC	Electrak 10
			
DF	PPA-DC	PPA-AC	D
12, 24, 36	12, 24, 36, 90	-	12, 24, 36
115	-	115, 230	-
2000	6670	6670	6800
71	33	15	60
406	914	914	610
0	23	23	12
IP56	IP52	IP45	IP65
clevis	trunnion	trunnion	clevis
worm	ball	ball	acme / ball
DPDT SWITCH	AC-063	DPDT switch	AC-063
	3	3	3
3	3	3	3
3	3	3	3
3	3	3	3
	3	3	
	3	3	3

## Performance Overview



### General Features

Part number suffix		PR	A	DA
DC Input Voltages	Vdc	12, 24	-	12, 24, 36
AC Input Voltages	Vac	-	115, 230, 400	-
Maximum Dynamic Load	N	9000	6800	6800
Maximum Speed	mm/s	51	60	60
Maximum Stroke Length	mm	300	610	600
Restraining Torque	Nm	17 / 0	12	0
Protection Class		IP66	IP45	IP65
Mounting Config		clevis	clevis	clevis / trunnion
Screw type		acme / ball	acme / ball	acme / ball
Recommended Control		AC-063	DPDT switch	AC-063

### Standard Features

Overload clutch			3	3
Motor overload protection		3	3	3
End of stroke limit switches		3		
Potentiometer feedback				
Dynamic bracking		3		
Manual Override		3		

### Optional Features

End of stroke limit switches			3	
Potentiometer feedback		3	3	3
Encoder feedback		3		
Programmable limit switches		3		
End of stroke outputs		3		
Low voltage power switching		3		
Manual Override			3	3

LA 24	TC 16 Lift Column	DMD Lift Column	DMA Lift Column
			
AA	TC16	DMD	DMA
-	24	12, 24, 36	-
230, 400	-	-	115, 230, 400
6800	2000	6800	6800
60	19	60	60
600	400	610	610
0	0	0	0
IP45	IP44	IP65	IP45
clevis / trunion	bass mount	base mount	base mount
acme / ball	acme	acme / ball	acme / ball
DPDT switch	DCG-180	AC-063	DPDT switch
3		3	3
3		3	3
	3		
	3		
3		3	3
	3		
3			

# Treotham

World leading brands distributed by Treotham

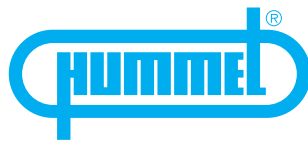


Chainflex®

ELFIN



Fortress  
Interlocks



igus®



pitz



REER



THOMSON TOLLO



WITTENSTEIN

