BALL SCREW JACKS ORDERING INFORMATION

Instructions: Select a model number from this chart.

1-Ton Standard	2-Ton Standard	2-Ton Reverse Base Standard	5-Ton Standard	10-Ton Standard	10-Ton Heavy Duty	20-Ton Standard	30-Ton Standard	50-Ton Standard
WBL51 WBL201	WB62 WB122 WB242	RWB62 RWB122 RWB242	WB65 WB125 WB245	WBL810 WBL2410	WB810 WB2410	WB820 WB2420	WB1130 WB3230	WB1150 WB3250
1-Ton Heavy Duty	**2-Ton High Lead**	**2-Ton Reverse Base High Lead**	**5-Ton High Lead**	**10-Ton Standard High Lead**	**10-Ton Heavy Duty High Lead**			**50-Ton Reverse Base**
WB51 WB201	HWB62 HWB122 HWB242	RHWB62 RHWB122 RHWB242	HWB65 HWB125 HWB245	HWBL810 HWBL2410	HWB810 HWB2410			RWB1150 RWB3250

Important Note: *Not self-locking, may lower under load. Brake motors or external locking systems are required.
** Keyed for non-rotation is not a standard option. Contact sales@joycedayton.com

H: indicates High lead (2-ton, 5-ton and 10-ton only).

R: Reverse Base Jack (2-ton and 50-ton only).

Sample Part Number: WB65U4S-6.0-STDX-STDX-B

Jack Configuration

U=Upright

I=Inverted

End Conditions

1=T1
(plain end)

2=T2
(load pad)

3=T3
(threaded end)

4=T4
(male clevis)

Left Side Shaft Code
(see below)

XXXX=Remove
STDX=Standard
CUST=Custom

For optional shaft codes, see page 83.

Right Side Shaft Code
(see below)

XXXX=Remove
STDX=Standard
CUST=Custom

For optional shaft codes, see page 83.

Additional Options*

X=Standard Jack, no additional options

S=Additional Specification Required (comment as necessary)

Protective Boots pp. 171-173
B=Protective Boot
D=Dual Protective Boot

Finishes p. 182
F1=Do Not Paint
F2=Epoxy Paint
F3=Outdoor Paint Process

Motor Options
M1=Less Motor
M2=Brake Motor
M3=Single Phase Motor (120VAC)
M4=50Hz Motor
M5=Special Motor

Grease/Seals
H1=High Temperature Operation
H2=Food Grade

Screw Stops
ST0=Extending

* Specify as many options as needed

Ball Screw Jack Rise

Rise is travel expressed in inches and not the actual screw length.

Jack Designs

S=Translating

K=Keyed for Non Rotation**

N=Traveling Nut

D=Double Clevis

A=KFTN Trunnion*
T=Trunnion*

*Standard trunnion mounts available on 2-ton through 20-ton jacks. (See page 183)

**Keyed for non-rotation is not a standard option. Contact Joyce with your requirements.

BALL SCREW JACKS SPECIFICATIONS

Model	Capacity	Screw Diameter (Inches)	Thread Pitch/Lead	Worm Gear Ratio	Worm Shaft Turns for 1" Travel	Tare Torque (Inch Lbs.)	Starting Torque (Inch Lbs.)	Operating Torque (Inch Lbs.)	Efficiency Rating % Approx	Screw Torque (Inch Lbs.)	Worm Holding Torque	Ball Nut Life at Rated Load (Inch Screw Travel x 1000)	Basic Jack Weight (Lbs.)	Screw Weight per Inch Travel (Lbs.)
WBL51	1 ton	3/4	0.2	5:1	25	3	.014W*	.012W* @ 500 RPM	51.7	.035W*	.006W*	108	8	0.25
WBL201				20:1	100		.005W*	.004W* @ 500 RPM	38.5		.002W*			
WB51				5:1	25		.014W*	.012W* @ 500 RPM	51.7		.006W*	858		
WB201				20:1	100		.005W*	.004W* @ 500 RPM	38.5		.002W*			
(R)WB62	2 ton	1	0.25	6:1	24	4	.015W*	.013W* @ 500 RPM	52.1	.044W*	.007W*	642	18	0.4
(R)WB122				12:1	48		.009W*	.007W* @ 500 RPM	47.2		.004W*			
(R)WB242				24:1	96		.006W*	.004W* @ 500 RPM	39.3		.002W*			
(R)HWB62			1.0	6:1	6		.064W*	.051W* @ 500 RPM	52.1	.177W*	.033W*	190		
(R)HWB122				12:1	12		.039W*	.028W* @ 500 RPM	47.2		.020W*			
(R)HWB242				24:1	24		.028W*	.017W* @ 500 RPM	39.3		.014W*			
WB65	5 ton	1 1/2	0.474	6:1	12.66	10	.030W*	.025W* @ 300 RPM	51.1	.084W*	.013W*	1015	42	0.7
WB125				12:1	25.33		.019W*	.014W* @ 300 RPM	45.7		.007W*			
WB245				24:1	50.66		.013W*	.008W* @ 300 RPM	37.2		.004W*			
HWB65			1.0	6:1	6		.065W*	.052W* @ 300 RPM	51.1	0.177W*	.033W*	512		
HWB125				12:1	12		.041W*	.029W* @ 300 RPM	45.7		.020W*			
HWB245				24:1	24		.029W*	.018W* @ 300 RPM	37.2		.014W*			
WBL810	10 ton	1 1/2	0.474	8:1	16.88	20	.022W*	.019W* @ 200 RPM	50.7	.084W*	.010W*	127	58	0.9
WBL2410				24:1	50.66		.010W*	.008W* @ 200 RPM	40.3		.004W*			
HWBL810			1.0	8:1	8		.047W*	.039W* @ 200 RPM	50.7	.177W*	.024W*	64		
HWBL2410				24:1	24		.024W*	.016W* @ 200 RPM	40.3		.012W*			
WB810	10 ton	2	0.5	8:1	16	20	.023W*	.019W* @ 200 RPM	50.7	.088W*	.009W*	729	62	1.4
WB2410				24:1	48		.011W*	.008W* @ 200 RPM	40.3		.003W*			
HWB810			1.0	8:1	8		.047W*	.039W* @ 200 RPM	50.7	.177W*	.018W*	1423		
HWB2410				24:1	24		.023W*	.016W* @ 200 RPM	40.3		.006W*			
WB820	20 ton	2 1/4	0.5	8:1	16	40	.024W*	.020W* @ 200 RPM	47.4	.088W*	.009W*	121	105	2.6
WB2420				24:1	48		.012W*	.009W* @ 200 RPM	35		.003W*			
WB1130	30 ton	3	0.66	11:1	16.67	60	.027W*	.020W* @ 200 RPM	48	.117W*	.009W*	343	220	3.2
WB3230				32:1	48.48		.016W*	.009W* @ 200 RPM	35		.003W*			
(R)WB1150	50 ton	4	1.0	11:1	11	100	.038W*	.029W* @ 200 RPM	49.3	.177W*	.013W*	614	460	4.8
(R)WB3250				32:1	32		.020W*	.012W* @ 200 RPM	37.5		.005W*			

Important Note: Ball Screw Jacks are not self-locking. Brake motors or external locking systems are required.

(R): Reverse Base Jack.

***W:** Load in pounds.

Tare Torque: Initial torque to overcome seal and normal assembly drag. This value must be added to starting torque or operating torque values.

Starting Torque: Torque value required to start moving a given load (dissipates to operating torque values once the load begins moving).

Operating Torque: Torque required to continuously raise a given load at the input RPM listed.

Screw Torque: Torque required to resist screw rotation (Translating Design Jacks) and traveling nut rotation (Keyed for Traveling Nut Design Jacks).

Worm Holding Torque: Torque required to prevent input shaft (worm) from backdriving.

Lead: The distance traveled axially in one rotation of the lifting screw.

Pitch: The distance from a point on a screw thread to a corresponding point on the next thread, measured axially.

Note: This chart is provided for reference only. For specific information such as column loading, ball nut life and other performance factors please refer to JAX® Online software or contact Joyce.