

# OPTIONS BOOTS FOR BALL SCREW JACKS

## For Translating Design Ball Screw Jacks

When boots are included on Joyce jacks or actuators, Joyce sizes them as part of our service to you.

Adding boots to most jacks will increase their retracted (closed) height, "A" or "B". The diagrams and chart below are provided as a reference to help you understand how the addition of standard boots increases the closed height of those jacks.

The retracted (closed) height, "A", or "B", is based on the jack capacity and it changes based on the length of travel (rise), and end condition of the lifting screw. For instance, an upright 2-ton jack with a T3 end condition and 12 inches of rise will have a greater closed dimension than the same 2-ton jack with just 3 inches of rise. Standard boot outside diameter, "C", and collar diameter at the base of the jack, "D" are listed in the chart below for reference.

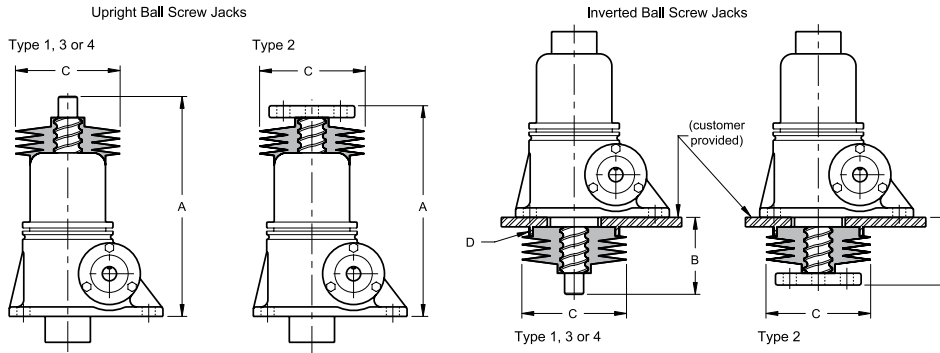
Although Joyce provides the stainless steel clamps needed to secure all boots in place, customers must provide a mounting ring of the standard diameter "D" to mount the boots on inverted jacks.

When you use Joyce 2D/3D online software to specify jacks with boots the drawings will accurately depict the added screw length needed to accommodate the boot, however the actual boot will not be shown on the drawing.

### Common Boot Options:

- Zippered boots
- Boots for high temperatures
- Boots for corrosive atmospheres

Contact Joyce for more information about these and other custom boot applications or boots for Bevel Gear Jacks.



△ The closed height of Type 4 jacks remains the same up to the maximum travel given in the chart below.

Jack Capacity	A - Closed Height for Upright Jack				▲ - Type 4**	B - Closed Height for Inverted Jack				▲ - Type 4**	C O.D. of Boot	D O.D. of Boot
	Type 1*	Type 2*	Type 3*	Type 4*		Type 1*	Type 2*	Type 3*	Type 4*			
1 Ton WBL	6 7/16	6 1/4	6 7/16	7 1/4	6	2 5/8	2 1/4	2 5/8	2 7/8	0	5	2 3/4
1 Ton WB	7 7/16	7 1/4	7 7/16	8 1/4	9	2 5/8	2 1/4	2 5/8	2 7/8	0	5	2 3/4
2 Ton	8 3/8	7 3/4	8 3/8	9 5/8	12	3 1/4	2 9/16	3 1/4	3 5/8	0	5	2 3/4
5 Ton	10 1/2	11	10 1/2	13 3/8	18	3 13/16	3 5/16	3 13/16	5 3/16	0	5 1/2	4 3/4
10 Ton WBL/HWBL	11 1/4	10 5/16	11 1/4	13 1/16	15	4 7/16	3 7/16	4 7/16	5 3/16	0	6 1/2	5 3/4
10 Ton WB/HWB	15	14 1/2	15	16 3/4	18	4 15/16	3 3/4	4 15/16	5 1/2	0	6 1/2	5 3/4
20 Ton	17 3/16	16 5/8	17 3/16	20 5/16	27	4 3/4	3 7/16	4 3/4	6 1/2	9	6 1/2	6
30 Ton	23 1/4	22 9/16	23 1/4	28 5/16	42	6 1/4	4	6 1/4	10	24	8	8 1/4
50 Ton	27 3/16	26 7/16	27 3/16	32 1/2	45	6 11/16	4 15/16	6 11/16	10 1/4	21	13	11 5/8

\* Closed height given must be increased by about 0.071" for each 1" of travel.

\*\* Type 4 closed height must be increased by about 0.071" for each 1" over the maximum given.

A and B dimensions generally increase when boots are added to jacks.

Note: Drawings are artist's conception — not for certification; dimensions are subject to change without notice.