

HEAD BLOCKS - Limits of Use

12" Double Purchase Upright

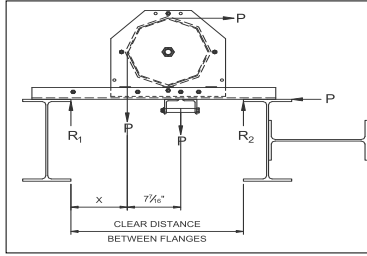
THESE TABLES APPLY TO JRC PART NUMBERS:

1XD-61255 REV 7
1XD-81255 REV 7
1ND-81255PA REV 1

Headblock Load Rating Table Instructions

- NOTE: There are individual tables for each size and orientation of head block
- Review the LIMITS OF USE section shown on the right hand side of this document. If your project does not meet the LIMITS OF USE, please contact J R Clancy for further information.
 - Review the project for the exact requirements of your specific head block. You will need to know the following information prior to using the head block load rating tables:
 - Orientation of block (upright or underhung) and for underhung, the attachment method.
 - Size of the block (sheave diameter at 8", 12", or 16")
 - The clear distance between the supporting head steel flanges (NOT the beam centerline distance).
 - The distance from the onstage side of the offstage beam flange to the offstage handline headblock you need.
 - Once you have located the tables for your particular block, on TABLE 1, go to the leftmost column on the table labeled "Clear Distance Between Flanges" or "Center - Center Weld Distance". Read down until you find the distance specific to your project.
 - Next find the "Distance Between Offstage Beam Flange and Handline (Dimension X)" across the top row of the spreadsheet.
 - Where your selected Row and Column intersect will be the Gross Load Capacity (in lbs) of your headblock.
 - Next find the cable diameter and sheave type in TABLE 2 below. Calculate the Tread Pressure Limited Capacity by multiplying the maximum individual line load \times the number of lift lines.
 - Your final maximum RWL for your head block will be the lesser of:
 - the Gross RWL from the Table, OR
 - the Tread Pressure Limited Capacity.

NOTE: The above values are based on block capacity only and do not reflect the capacity of the cable you use. Consult your wire rope manufacturer for the RWL for your particular cable.



Head Blocks - LIMITS OF USE

NOTE: RWL (Recommended Working Load) is a function of mounting conditions and is only valid when the following criteria are met:

- All lift lines wrap 90° around the sheave, all hand lines wrap 180° around the sheave. All headblocks mount on two beams, with the shaft between the beam centerlines. All cable fleet angles are less than 1.5°.
- For Underhung Headblocks, they shall be attached to structural steel in one of the following three methods:
- beam clip angles, min. two 2" x 1 1/4" x 1/4" angles, back to back bolted with 1/2" gr 5 bolts.
 - formed clips with two 1/2" gr 5 bolts, from one of the following JRC part #'s :
 - 070-38850, 070-38875, 070-388100
 - 070-38850, 070-38875, 070-388100
 - welded directly to the beam, min. four 1/4" fillet welds at 1.5" in length ea.
- For Upright Headblocks they shall be attached to structural steel by either b), or c) abc. The onstage connection to structure must have the bolt bear directly against the mounting steel in shear.
- CONTACT J R CLANCY FOR OTHER MOUNTING CONDITIONS.

12" Double Purchase Upright Head Block

Clear Distance Between Flanges	Distance Between Offstage Beam Flange and Offstage Handline (Dimension "X")																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
10	3401	3401	3401	3201														
11	3401	3401	3401	3401	2297													
12	3322	3401	3401	3401	3211	1825												
13	2976	3311	3401	3401	3401	2533	1554											
14	2732	2945	3301	3401	3401	3401	2145	1379										
15	2550	2687	2918	3292	3401	3401	3198	1894	1257									
16	2410	2496	2650	2895	3284	3401	3401	2810	1717	1166								
17	1816	2349	2451	2617	2876	3278	3401	3401	2539	1587	1096							
18	1198	1575	2297	2411	2589	2858	3272	3401	3401	2338	1487	1041						
19	970	1162	1540	2253	2377	2565	2843	3267	3401	3401	2184	1407	996					
20	829	940	1133	1510	2214	2348	2543	2829	3262	3401	3401	2061	1343	958				
21	733	801	914	1108	1483	2181	2321	2523	2817	3258	3401	3401	1962	1289	927			
22	663	707	778	892	1086	1460	2151	2298	2506	2806	3254	3401	3377	1879	1244	900		
23	610	638	684	757	872	1067	1439	2124	2277	2490	2796	3250	3401	3228	1810	1206	877	
24	568	586	617	665	739	855	1050	1421	2060	2258	2476	2787	3247	3401	3103	1750	1172	857
25	534	545	565	598	648	724	840	1034	1405	1867	2131	2463	2778	3244	3401	2996	1699	1143
26	507	512	525	547	582	633	710	827	1021	1390	1718	1987	2452	2771	3241	3401	2903	1654
27	483	484	492	507	532	568	620	697	815	1009	1376	1600	1871	2410	2764	3239	3401	2823
28	464	461	465	475	492	518	555	609	686	804	997	1354	1503	1774	2302	2757	3237	3401
29	447	442	443	449	460	479	506	544	598	676	794	987	1271	1424	1692	2210	2751	3234
30	432	425	424	426	434	448	467	495	534	589	667	785	978	1202	1357	1623	2131	2745

Indicates dimension recommended in JRC Design Guide

TABLE 2 - MAXIMUM LINE LOADS			
12" Sheave Line Load limited by Tread Pressure			
Cable Diameter	Cast	Steel	Nylon
1/4"	750	1500	5250

NOTE: The above values are based on block capacity only and do not reflect the capacity of the cable you use. Consult your wire rope manufacturer for the RWL for your particular cable.