THESE TABLES APPLY TO JRC PART NUMBERS: 100-81655C381 REV 4

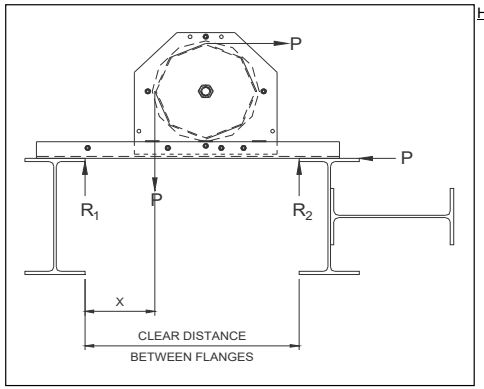
Base Angle: 2 1/2 x 2 x 1/4

Headblock Load Rating Table Instructions

NOTE: There are individual tables for each size and orientation of head block

1. 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.
2. 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:
   a. Orientation of block (upright or underhung) and for underhung, the attachment method.
   b. Size of the block (sheave diameter at: 8", 12", or 16")
   c. The clear distance between the supporting head steel flanges (NOT the beam centerline distance).
   d. The distance from the onstage side of the offstage beam flange to the offstage handline.
3. Once you know the above information find the tables that match the size and orientation of the headblock you need.
4. 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.
5. Next find the " Distance Between Offstage Beam Flange and Handline (Dimension X) " across the top row of the spreadsheet.
6. Where your selected Row and Column intersect will be the Gross Load Capacity (in lbs) of your headblock.
7. 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 x the number of lift lines.
8. Your final maximum RWL for your head block will be the lesser of:
   a. the Gross RWL from the Table, OR
   b. 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:

1. All lift lines wrap 90° around the sheave, all hand lines wrap 180° around the sheave.
2. All headblocks mount on two beams, with the shaft between the beam centerlines.
3. All cable fleet angles are less than 1.5°.
4. For Underhung Headblocks, they shall be attached to structural steel in one of the following three methods:
   a) beam clip angles, min. two 2" x 1 1/4" x 1/4" angles, back to back bolted with two 1/2" gr 5 bolts..
   b) formed clips with two 1/2" gr 5 bolts, from one of the following JRC part #'s :
      i. 070-38650, 070-38675, 070-386100
      ii. 070-38850, 070-38875, 070-388100
   c) welded directly to the beam, min. four 1/4" fillet welds at 1.5" in length ea.
5. For Upright Headblocks they shall be attached to structural steel by either b), or c) above.
6. The onstage connection to structure must have the bolt bear directly against the mounting steel in shear.
7. CONTACT J R CLANCY FOR OTHER MOUNTING CONDITIONS.

TABLE 1 - HEAD BLOCK GROSS LOAD CAPACITY (in lbs.) - 16" Single Purchase Upright

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	5390	5390																
11	5390	5390	5390															
12	5390	5390	5390	5390														
13	5390	5390	5390	5390	4151													
14	5390	5390	5390	5390	4989	3255												
15	5390	5390	5390	5390	5390	3893	2743											
16	5390	5390	5390	5390	5390	4697	3265	2410										
17	5390	5390	5390	5390	5390	5390	3924	2858	2178									
18	5390	5390	5390	5390	5390	5390	4783	3424	2573	2006								
19	5390	5390	5390	5390	5390	5390	5390	4160	3073	2363	1873							
20	5390	5390	5390	5390	5390	5390	5390	5158	3723	2813	2200	1768						
21	4001	5390	5390	5390	5390	5390	5390	5390	4605	3400	2614	2072	1683					
22	2929	3978	5390	5390	5390	5390	5390	5390	5390	4196	3152	2455	1967	1612				
23	2353	2906	3957	5390	5390	5390	5390	5390	5390	5337	3882	2955	2327	1881	1552			
24	1994	2331	2886	3938	5390	5390	5390	5390	5390	5390	4928	3632	2795	2220	1808	1501		
25	1749	1971	2310	2867	3921	5390	5390	5390	5390	5390	5390	4603	3429	2662	2130	1745	1457	
26	1570	1726	1951	2291	2850	3905	5390	5390	5390	5390	5390	5390	4339	3261	2550	2053	1691	1419
27	1435	1547	1705	1932	2274	2834	3891	5390	5390	5390	5390	5390	5390	4120	3119	2454	1987	1644
28	1328	1412	1527	1687	1915	2259	2819	3877	5390	5390	5390	5390	5390	5390	3935	2998	2372	1929
29	1242	1305	1391	1508	1670	1900	2244	2806	3865	5390	5390	5390	5390	5390	5202	3778	2894	2300
30	1171	1220	1285	1373	1491	1654	1885	2231	2794	3853	5390	5390	5390	5390	5390	4988	3642	2803

Indicates dimension recommended in JRC Design Guide

TABLE 2 - MAXIMUM LINE LOADS			
16" Sheave Line Load limited by Tread Pressure			
Cable Diameter	Cast	Steel	Nylon
1/4"	1000	2000	7000
3/8"	1500	3000	10500

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.

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