THESE TABLES APPLY TO JRC PART NUMBERS: 100-60855C25 REV 8
100-80855C25 REV 9

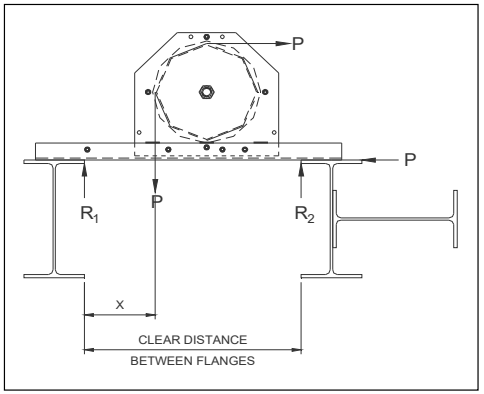
# Base Angle: 2 x 1 1/2 x 1/4

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.) - 8" 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 | 2906 | 2906 | 2906 | 2906 | 2906 | 2081 | | | | | | | | | | | | |
| 11 | 2906 | 2906 | 2906 | 2906 | 2906 | 2760 | 1847 | | | | | | | | | | | |
| 12 | 2906 | 2906 | 2906 | 2906 | 2906 | 2906 | 2430 | 1689 | | | | | | | | | | |
| 13 | 2164 | 2906 | 2906 | 2906 | 2906 | 2906 | 2906 | 2207 | 1575 | | | | | | | | | |
| 14 | 1720 | 2134 | 2906 | 2906 | 2906 | 2906 | 2906 | 2906 | 2045 | 1489 | | | | | | | | |
| 15 | 1461 | 1688 | 2109 | 2906 | 2906 | 2906 | 2906 | 2906 | 2759 | 1924 | 1422 | | | | | | | |
| 16 | 1291 | 1427 | 1660 | 2087 | 2906 | 2906 | 2906 | 2906 | 2906 | 2583 | 1828 | 1367 | | | | | | |
| 17 | 1170 | 1256 | 1398 | 1637 | 2068 | 2906 | 2906 | 2906 | 2906 | 2906 | 2446 | 1752 | 1323 | | | | | |
| 18 | 1081 | 1134 | 1226 | 1374 | 1617 | 2052 | 2906 | 2906 | 2906 | 2906 | 2906 | 2335 | 1689 | 1286 | | | | |
| 19 | 1011 | 1044 | 1104 | 1201 | 1352 | 1599 | 2037 | 2906 | 2906 | 2906 | 2906 | 2906 | 2245 | 1636 | 1254 | | | |
| 20 | 956 | 975 | 1014 | 1079 | 1179 | 1334 | 1583 | 2024 | 2906 | 2906 | 2906 | 2906 | 2906 | 2169 | 1592 | 1227 | | |
| 21 | 911 | 919 | 944 | 988 | 1056 | 1160 | 1317 | 1569 | 2013 | 2906 | 2906 | 2906 | 2906 | 2906 | 2104 | 1553 | 1204 | |
| 22 | 874 | 874 | 888 | 917 | 965 | 1037 | 1143 | 1303 | 1557 | 2003 | 2906 | 2906 | 2906 | 2906 | 2906 | 2049 | 1520 | 1183 |
| 23 | 842 | 836 | 843 | 861 | 895 | 945 | 1020 | 1128 | 1290 | 1546 | 1993 | 2906 | 2906 | 2906 | 2906 | 2891 | 2001 | 1491 |
| 24 | 815 | 805 | 805 | 816 | 838 | 875 | 928 | 1004 | 1115 | 1278 | 1535 | 1985 | 2906 | 2906 | 2906 | 2906 | 2818 | 1959 |
| 25 | 792 | 778 | 773 | 778 | 793 | 818 | 857 | 913 | 991 | 1103 | 1268 | 1526 | 1977 | 2906 | 2906 | 2906 | 2906 | 2754 |
| 26 | 772 | 754 | 746 | 746 | 755 | 772 | 801 | 841 | 899 | 979 | 1092 | 1258 | 1518 | 1970 | 2906 | 2906 | 2906 | 2906 |
| 27 | 754 | 734 | 722 | 719 | 723 | 734 | 755 | 785 | 827 | 886 | 968 | 1082 | 1249 | 1510 | 1963 | 2906 | 2906 | 2906 |
| 28 | 738 | 716 | 702 | 695 | 695 | 702 | 716 | 739 | 771 | 815 | 875 | 957 | 1073 | 1241 | 1503 | 1957 | 2906 | 2906 |
| 29 | 723 | 700 | 683 | 674 | 671 | 675 | 684 | 700 | 724 | 758 | 804 | 865 | 948 | 1065 | 1234 | 1497 | 1952 | 2906 |
| 30 | 711 | 685 | 667 | 656 | 651 | 651 | 656 | 668 | 686 | 712 | 747 | 793 | 856 | 940 | 1057 | 1227 | 1491 | 1947 |

Indicates dimension recommended in JRC Design Guide

| TABLE 2 - MAXIMUM LINE LOADS | | | |
|---|---|---|---|
| 8.5" Sheave Line Load limited by Tread Pressure | | | |
| Cable Diameter | Cast | Steel | Nylon |
| 1/4" | 500 | 1000 | 3500 |

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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