## HV Chain dimensions

Press Fit Guide Links Type 63-139


3/8, 1/2, 3/4 and 1

|  |  |  |
| :---: | :---: | :---: |
| Chain Pitch <br> Inches | *AA <br> Inches | Height of Chain <br> $\mathbf{B}$ <br> Inches |
| $3 / 8$ | $.169 \pm .004$ | $.428 \pm .002$ |
| $1 / 2$ | $.225 \pm .004$ | $.570 \pm .002$ |
| $3 / 4$ | $.387 \pm .006$ | $.855 \pm .003$ |
| 1 | $.450 \pm .008$ | $1.140 \pm .004$ |

*A = Height of chain above Nominal Pitch Diameter of Sprocket

Press Fit Guide Links Type 61-115


## 1 1/2 and 2 Inch Pitch HV

| Chain Pitch <br> Inches |  |  |
| :---: | :---: | :---: |
| $11 / 2$ | *A <br> Inches | Height of Chain <br> B <br> Inches |
| 2 | $.810 \pm .010$ | $1.645 \pm .005$ |
|  | $1.080 \pm .012$ | $2.193 \pm .007$ |

Press Fit Guide Type Assemblies 3/8, 1/2, 3/4 and 1 Inch Pitch


Connecting Pin Spiral Pin Types


Washer Type Assemblies
11/2, 2 Inch Pitch


3/8 and $1 / 2$ inch Pitch HV Chains

|  |  |  |  |
| :---: | ---: | ---: | :---: |
| Chain <br> Nominal <br> Width <br> Inches | C | D | E |
| $3 / 4$ | .685 | .895 | 1.029 |
| 1 | .937 | 1.147 | 1.281 |
| $11 / 2$ | 1.441 | 1.651 | 1.785 |
| 2 | 1.945 | 2.155 | 2.289 |
| 3 | 2.945 | 3.155 | 3.289 |
| 4 | 3.945 | 4.155 | 4.289 |
| 5 | 4.945 | 5.155 | 5.289 |

3/4, 1 1/2 and 2 Inch Pitch HV Chains

| Chain Pitch <br> Inches |  | *Width For First Inch |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | C | D | E |  |
| $3 / 4$ | .932 | 1.203 | 1.367 |  |
| 1 | .892 | 1.785 | 1.545 |  |
| $11 / 2$ | .621 | 1.315 | 1.355 |  |
| 2 | .508 | 1.400 | 1.422 |  |

* For widths greater than 1 in. add width desired minus 1 in. to above
dimensions. Example: 3/4 pitch, 2 inch wide, the width between guides is 1.750 inches.


## HV chain

| (1) HV <br> Chain Designation | (2) <br> Nominal Width Inches | Average Ultimate Tensile Stength In Pounds | Average Wt. Per Foot In Pounds |
| :---: | :---: | :---: | :---: |
| 3/8 Inch Pitch |  |  |  |
| HV-303 | 3/4 | 5,625 | . 65 |
| HV-304 | 1 | 7,500 | . 86 |
| HV-306 | 1 1/2 | 11,250 | 1.30 |
| HV-308 | 2 | 15,000 | 1.73 |
| HV-312 | 3 | 22,500 | 2.59 |
| 1/2 Inch Pitch |  |  |  |
| HV-404 | 1 | 10,000 | 1.15 |
| HV-406 | 1 1/2 | 15,000 | 1.73 |
| HV-408 | 2 | 20,000 | 2.30 |
| HV-412 | 3 | 30,000 | 3.45 |
| HV-416 | 4 | 40,000 | 4.60 |
| 3/4 Inch Pitch |  |  |  |
| HV-606 | 1 1/2 | 22,500 | 2.60 |
| HV-608 | 2 | 30,000 | 3.50 |
| HV-612 | 3 | 45,000 | 5.20 |
| HV-616 | 4 | 60,000 | 6.90 |
| HV-620 | 5 | 75,000 | 8.60 |


| (1) <br> HV <br> Chain <br> Designation | (2) <br> Nominal Width Inches | Average Ultimate Tensile Strength In Pounds | Average Wt. <br> Per Foot In Pounds |
| :---: | :---: | :---: | :---: |
| 1 Inch Pitch |  |  |  |
| HV-808 | 2 | 40,000 | 4.60 |
| HV-812 | 3 | 60,000 | 6.90 |
| HV-816 | 4 | 80,000 | 9.20 |
| HV-820 | 5 | 100,000 | 11.50 |
| HV-824 | 6 | 120,000 | 13.80 |
| 1 1/2 Inch Pitch |  |  |  |
| HV-1212 | 3 | 90,000 | 10.40 |
| HV-1216 | 4 | 120,000 | 13.80 |
| HV-1220 | 5 | 150,000 | 17.30 |
| HV-1224 | 6 | 180,000 | 20.70 |
| 2 Inch Pitch |  |  |  |
| HV-1612 | 3 | 120,000 | 13.80 |
| HV-1616 | 4 | 160,000 | 18.40 |
| HV-1620 | 5 | 200,000 | 23.00 |
| HV-1624 | 6 | 240,000 | 27.60 |

(1) Above chain sizes are stock in 10 ft . boxes. Each stock ( 10 ft .) and cut-to-length chains are supplied with one connecting pin set. Offset sections are not available.
(2) Widths other than listed are available for special, approved applications.

## HV drive selection

1. Determine the R.P.M. and diameter of the high speed shaft.
2. Determine the total horsepower to be transmitted.
3. Determine proper service factor from table on page I-10.
4. Establish Design Horsepower by multiplying total horsepower to be transmitted by the proper service factor.
5. Select the chain pitch and width and number of teeth in the small sprocket from the Horsepower Rating Tables.
a. Be sure the small sprocket will accommodate the high speed shaft diameter.
b. If the high speed shaft diameter exceeds the maximum bore in the selected small sprocket it will be necessary either to increase the number of teeth in the sprocket or select the next larger pitch chain.
6. Determine the required ratio:

RPM high speed shaft
$\frac{\text { RPM slow speed shaft }}{}=$ Ratio
7. Multiply the number of teeth in the small sprocket by the ratio to obtain the number of teeth in the large sprocket.
8. Turn to page I-11 to calculate chain length. HV drives use modified center distances to compensate for chain and sprocket tolerance as determined on page l-18.

