

* MALE ROD END SHOWN See sheet 4 for male \& female variations and dimensions

| $\begin{gathered} \text { CYLINDER } \\ \text { SIZE } \end{gathered}$ | $\begin{gathered} \text { ROD DIA. } \\ \text { E E } \end{gathered}$ | E | D | YA | Y B | A | AA | B | F | $\begin{gathered} H \\ \text { BSPP. } \end{gathered}$ | J | K | R | YC | YD | YF | YH | DD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { HB } 15 \\ 1.50^{\prime \prime} \text { BORE } \end{gathered}$ | $\underset{15.87}{0.625^{\prime \prime}} \text { STD. }$ | $\begin{aligned} & 0.63^{\prime \prime} \\ & 15.87 \end{aligned}$ | $\begin{array}{\|c\|} \hline 2.00 " \\ 50.8 \\ \hline \end{array}$ | $\begin{aligned} & 6.88^{\prime \prime} \\ & 174.62 \end{aligned}$ | $\begin{aligned} & 6.38^{\prime \prime \prime} \\ & 161.92 \end{aligned}$ | $\begin{array}{\|l\|} 5.00 \\ 127.0 \end{array}$ | $\begin{gathered} 2.50^{\prime} \\ 63.5 \end{gathered}$ | $\begin{aligned} & 2.88 " \prime \prime \\ & 73.02 \end{aligned}$ | $\begin{array}{l\|l\|l\|} \hline 0.38 "^{\prime \prime} \\ 9.52 \end{array}$ | 1/2" | $\begin{aligned} & 1.75^{\prime \prime} \\ & 44.45 \end{aligned}$ | $\begin{gathered} 1.50 \text { " } \\ 38.1 \end{gathered}$ | $\begin{array}{\|c} \hline 0.50 \prime \prime \\ 12.7 \end{array}$ | $\begin{aligned} & 0.75 " \\ & 19.05 \end{aligned}$ | $\begin{gathered} 0.50 \prime \prime \\ 12.7 \end{gathered}$ | $\begin{array}{\|l\|} \hline 0.75^{\prime \prime} \\ 19.05 \end{array}$ | $\begin{aligned} & 0.63^{\prime} \\ & 15.87 \end{aligned}$ | $\begin{gathered} 0.50^{\prime \prime} \\ 12.7 \end{gathered}$ |
|  | ${ }_{\text {1.000" }}$ | $\begin{aligned} & 1.00^{\prime \prime} \\ & 25.4 \end{aligned}$ | $\begin{array}{\|l\|} \hline 2.38 " \\ 60.32 \\ \hline \end{array}$ | $\begin{aligned} & 7.25 " 1 \\ & 184.15 \end{aligned}$ | $\begin{aligned} & 6.75^{\prime \prime} \\ & \hline 171.45 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { HB } 20 \\ 2.00^{\prime \prime} \text { BORE } \end{gathered}$ | ${ }_{25.4}^{1.000{ }^{\prime \prime} \text { STD. }}$ | $0.75^{\prime \prime}$ | $\begin{aligned} & 2.38{ }^{\prime \prime} \\ & 60.32 \end{aligned}$ | $\begin{aligned} & 8.001 " \\ & 203.2 \end{aligned}$ | $\begin{aligned} & 7.25^{\prime \prime} \\ & 184.15 \end{aligned}$ | $5.25^{\prime \prime}$ | $\begin{array}{\|c\|c\|} \hline 3.00^{\prime \prime} \\ 76.2 \end{array}$ | $\begin{aligned} & 2.8 \text { " }^{\prime \prime} \\ & 73.02 \end{aligned}$ | $\begin{array}{l\|l\|} \hline & 0.62^{\prime \prime} \\ 15.87 \end{array}$ | 1/2" | $\begin{aligned} & 1.75^{\prime \prime} \\ & 44.45 \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline 1.50 " 1 \\ 38.1 \end{array}$ | $\begin{array}{\|l\|l\|} \hline 0.63 " 15.87 \\ \hline \end{array}$ | $\begin{aligned} & 1.25^{\prime \prime} \\ & 31.75 \end{aligned}$ | $\begin{aligned} & 0.75^{\prime \prime} \\ & 19.05 \end{aligned}$ | $\begin{array}{l\|l\|} \hline 1.25 \text { " } \\ 31.75 \end{array}$ | $\begin{aligned} & 0.94^{\prime} \\ & 23.81 \end{aligned}$ | $\begin{aligned} & 0.75^{\prime \prime} \\ & 19.05 \end{aligned}$ |
|  | $1.375^{\prime \prime}$ | $1.00^{\prime \prime}$ | $\left\lvert\, \begin{aligned} & 2.63^{\prime \prime} \\ & 66.68 \end{aligned}\right.$ | $\begin{aligned} & 8.25^{\prime \prime} \\ & 209.55 \end{aligned}$ | $\begin{aligned} & 7.501 " \\ & \hline 190.5 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { HB } 25 \\ 2.50^{\prime \prime} \text { Bore } \end{gathered}$ | $\begin{array}{\|c\|c\|} \hline 1.000 " \text { STD. } \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 0.75 " \prime \\ \hline 19.05 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 2.38^{\prime \prime} \\ 60.32 \\ \hline \end{array}$ | $\begin{array}{r} 8.13^{\prime \prime} \\ 206.37 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 7.38^{\prime \prime} \\ 187.32 \\ \hline \end{array}$ | $\begin{aligned} & 5.38 \prime \prime \\ & 136.52 \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline 3.50^{\prime \prime} \\ 88.9 \end{array}$ | $\begin{array}{\|c\|c\|} \hline 3.00 " \prime \\ 76.2 \end{array}$ | $\begin{array}{\|l\|l\|} \hline 0.62^{\prime \prime} \\ 15.87 \end{array}$ | 1/2" | $\begin{aligned} & 1.75^{\prime \prime} \\ & 44.45 \end{aligned}$ | $\begin{array}{\|c\|} \hline 1.50^{\prime \prime} \\ 38.1 \end{array}$ | $\begin{array}{\|l\|l\|} \hline 0.63 " 15 \\ 15.87 \end{array}$ | $\begin{aligned} & 1.25^{\prime \prime} \\ & 31.75 \end{aligned}$ | $\begin{array}{\|c\|} \hline 0.75 " \\ \hline 19.05 \end{array}$ | $\begin{gathered} 1.25^{\prime \prime} \\ 31.75 \end{gathered}$ | $\begin{aligned} & 0.94 " 1 \\ & 23.81 \end{aligned}$ | $\left\lvert\, \begin{gathered} 0.75 \prime \prime \prime \\ 19.05 \end{gathered}\right.$ |
|  | $1.375^{\prime \prime}$ | $1.00^{\prime \prime}$ | $\begin{array}{\|c\|} \hline 2.63^{\prime \prime} \\ 66.68 \end{array}$ | $\left.\right\|_{212.73} ^{8.38 " 1}$ | $\begin{array}{\|l\|} \hline 7.63^{\prime \prime} \\ 193.68 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $1.750^{\prime \prime}$ | $1.25^{\prime \prime}$ | $\begin{array}{\|l\|} \hline 2.88^{\prime \prime} \\ 73.02 \\ \hline \end{array}$ | $\begin{gathered} 8.63^{\prime \prime} \\ 219.07 \end{gathered}$ | $\begin{array}{\|l\|} \hline 7.88{ }^{\prime \prime} \\ 200.02 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{cc} \mathrm{HB} & 32 \\ 3.25^{\prime \prime} & \text { Bore } \end{array}$ | $\underset{34.92}{1.375^{\prime \prime} \text { STD. } . ~}$ | $\begin{aligned} & 0.88^{\prime \prime} \\ & 22.22 \end{aligned}$ | $\begin{array}{\|l\|} \hline 2.75^{\prime \prime} \\ 69.85 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 9.63^{\prime \prime} \\ 244.47 \\ \hline \end{array}$ | $\begin{aligned} & 8.63^{\prime \prime} \\ & 219.07 \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.25^{\prime \prime} \\ & 158.75 \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline 4.50^{\prime \prime} \\ 114.3 \end{array}$ | $\begin{array}{\|c\|c\|} \hline 3.50 " \\ 88.9 \end{array}$ | $\begin{aligned} & 0.75{ }^{\prime \prime} \\ & 19.05 \end{aligned}$ | 3/4" | $\begin{array}{\|l\|} \hline 2.00^{\prime \prime} \\ 50.8 \end{array}$ | $\begin{aligned} & 1.75 \prime \prime \prime \\ & 44.45 \end{aligned}$ | $\begin{aligned} & 0.75 " \\ & 19.05 \end{aligned}$ | $\begin{gathered} 1.50 \prime \prime \\ 38.1 \end{gathered}$ | $\begin{aligned} & 1.00^{\prime \prime} \\ & 25.4 \end{aligned}$ | $\begin{array}{\|c\|} \hline 1.50 " \\ 38.1 \end{array}$ | $\begin{array}{\|l\|l\|} \hline 1.19 " \\ 30.15 \\ \hline \end{array}$ | $\begin{array}{l\|} \hline 1.00^{\prime \prime} \\ 25.4 \end{array}$ |
|  | $1.750^{\prime \prime}$ | $1.13 "$ | $\begin{array}{\|c\|c\|} \hline 3.00{ }^{\prime \prime} \\ 76.2 \\ \hline \end{array}$ | ${ }^{9.88^{\prime \prime}}$ | $8.88^{\prime \prime}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.000" ${ }_{50.8}$ | $1.25^{\prime \prime}$ | $\begin{array}{\|l\|} \hline 3.13 " 10 \mid \\ 79.38 \end{array}$ | $\begin{aligned} & 10.0^{\prime \prime \prime} \\ & 254.0 \end{aligned}$ | $\begin{array}{l\|} \hline 9.00 " \\ 228.6 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { HB } 40 \\ \text { 4.00" Bore } \end{gathered}$ | $\begin{array}{\|c} 1.750 " \text { STD. } \\ 44.45 \\ \hline \end{array}$ | $\begin{aligned} & \hline 1.00^{\prime \prime} \\ & 25.4 \end{aligned}$ | $\begin{array}{\|c\|} \hline 3.0011 \\ 76.2 \\ \hline \end{array}$ | $\begin{aligned} & 11.13^{11} \\ & 282.57 \end{aligned}$ | $\begin{array}{\|l\|} \hline 9.75^{\prime \prime} \\ 247.65 \\ \hline \end{array}$ | $\left\lvert\, \begin{aligned} & 6.63^{\prime \prime} \\ & 168.27 \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 5.00 \prime \prime \\ & 127.0 \end{aligned}\right.$ | $\begin{array}{\|l\|l\|l\|l\|l\|} \hline 3.75 .25 \\ 95.2 \end{array}$ | $\begin{array}{\|l\|l\|} \hline 0.88{ }^{\prime \prime} \\ 22.22 \end{array}$ | 3/4" | $\begin{array}{\|l\|} 2.00 \prime \prime \\ 50.8 \end{array}$ | $\begin{aligned} & 1.75 " \prime \prime \\ & 44.45 \end{aligned}$ | $\begin{aligned} & 0.75 " \prime \\ & 19.05 \end{aligned}$ | $\begin{aligned} & 2.13^{\prime \prime} \\ & 53.97 \end{aligned}$ | $\begin{array}{\|l\|} \hline 1.38^{\prime \prime} \\ 34.92 \end{array}$ | $\begin{aligned} & 2.00 " \\ & 50.8 \end{aligned}$ | $\begin{aligned} & 1.63 \prime \prime \\ & 41.27 \end{aligned}$ | $\begin{array}{\|l\|} \hline 1.38^{\prime \prime} \\ 34.92 \\ \hline \end{array}$ |
|  | 2.00011 50.8 | $\begin{array}{\|l\|l\|} \hline 1.11 "^{\prime \prime} \\ 28.57 \end{array}$ | $\left\lvert\, \begin{array}{l\|l\|} \hline 3.13 " 1 \\ 79.37 \end{array}\right.$ | $\begin{aligned} & 11.25^{\prime \prime} \\ & 285.75 \end{aligned}$ | $\begin{array}{\|} 9.88^{\prime \prime} \\ 250.82 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ${ }_{2}^{2.50001}$ | $\begin{aligned} & 1.38^{\prime \prime} \\ & 34.92 \end{aligned}$ | $\begin{array}{\|l\|} \hline 3.38^{\prime \prime} \\ 85.73 \\ \hline \end{array}$ | $\begin{gathered} 11.50 " 1 \\ 292.1 \end{gathered}$ | $\left.\right\|^{10.13^{\prime \prime \prime}}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { HB } 50 \\ \text { 5.00" BORE } \end{gathered}$ | $\underset{50.8}{2.000^{\prime \prime} \text { STD. }}$ | $\begin{array}{\|l\|} \hline 1.13^{\prime \prime} \\ 28.57 \end{array}$ | $\begin{array}{l\|} \hline 3.13 " 1 \\ 79.37 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 12.25^{\prime \prime} \\ 311.15 \\ \hline \end{array}$ | $\begin{aligned} & 10.5^{\prime \prime} \\ & 266.7 \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline 180.13^{\prime \prime} \\ \hline \end{array}$ | $\begin{array}{\|l\|l\|} \hline 6.50 " 1 \\ 165.1 \end{array}$ | $\begin{aligned} & 4.25^{\prime \prime} \\ & 107.95 \end{aligned}$ | $\begin{aligned} & 0.88 \prime \prime \prime \\ & 22.22 \end{aligned}$ | 3/4" | $\begin{array}{\|c} 2.00 " \\ 50.8 \end{array}$ | $\begin{aligned} & 1.75 \prime \prime \prime \\ & 44.45 \end{aligned}$ | $\begin{array}{l\|l\|} \hline 1.06^{\prime \prime} \\ 26.98 \end{array}$ | $\begin{array}{\|c} 2.25^{\prime \prime} \\ 57.15 \end{array}$ | $\begin{aligned} & 1.75 \prime \prime \prime \\ & 44.45 \end{aligned}$ | $\begin{array}{\|c\|} \hline 2.50^{\prime \prime} \\ 63.5 \\ \hline \end{array}$ | $\begin{aligned} & 2.13 " \prime \\ & 53.97 \end{aligned}$ | $\begin{array}{l\|l\|l\|} \hline 1.75 \prime \prime \prime \\ 44.45 \end{array}$ |
|  | 2.50011 63.5 | $\begin{array}{\|l\|l\|} \hline 1.38^{\prime \prime} \\ 34.92 \end{array}$ | $\begin{aligned} & 3.38^{\prime \prime} \\ & 85.73 \end{aligned}$ | $\begin{aligned} & 12.5^{\prime \prime} \\ & 317.5 \end{aligned}$ | $\begin{aligned} & 10.75^{\prime \prime} \\ & 273.05 \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $3.000{ }^{\prime \prime}$ | $\begin{array}{\|l\|} \hline 1.38^{\prime \prime} \\ 34.92 \end{array}$ | $\begin{array}{\|l\|} \hline 3.38^{\prime \prime} \\ 85.73 \\ \hline \end{array}$ | $\begin{aligned} & 12.5^{\prime \prime} \\ & 317.5 \end{aligned}$ | $\begin{array}{\|} 10.75^{\prime \prime} \\ 273.05 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $3.500^{\prime \prime}$ | $\begin{aligned} & 1.38^{\prime \prime} \\ & 34.92 \end{aligned}$ | $\begin{array}{\|l\|} \hline 3.38^{\prime \prime} \\ 85.73 \end{array}$ | $12.5^{\prime \prime}$ | $\begin{array}{\|l\|} 10.75^{\prime \prime} \\ 273.05 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { HB } 60 \\ \text { 6.00" BORE } \end{gathered}$ | ${ }_{63.5}^{2.500^{\prime \prime} \text { STD. }}$ | $\begin{aligned} & \hline 1.25^{\prime \prime} \\ & 31.75 \end{aligned}$ | $\begin{gathered} 3.50^{\prime \prime} \\ 88.9 \end{gathered}$ | $\begin{aligned} & 14.13 " \prime \\ & 358.77 \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline 12.13^{\prime \prime} \\ 307.97 \end{array}$ | $\begin{aligned} & 8.38 \prime \prime \\ & 212.72 \end{aligned}$ | $\begin{aligned} & 7.50 \prime \prime \\ & 190.50 \end{aligned}$ | $\begin{aligned} & 4.88^{\prime \prime} \\ & 132.82 \end{aligned}$ | $\left\{\begin{array}{l} 1.00 \times 1 \\ 25.4 \end{array}\right.$ | 1.00" | $\begin{array}{\|c\|} \hline 2.25^{\prime \prime} \\ 57.15 \\ \hline \end{array}$ | $\begin{array}{\|c\|c\|} \hline 2.25 " \prime \\ 57.15 \end{array}$ | $\begin{aligned} & 1.12^{\prime \prime} \\ & 28.57 \end{aligned}$ | $\begin{array}{\|c\|} \hline 2.50^{\prime \prime} \\ 63.5 \end{array}$ | $\begin{gathered} 2.00 \prime \prime \\ 50.8 \end{gathered}$ | $\begin{gathered} 2.50 \prime \prime \prime \\ 63.5 \end{gathered}$ | $\begin{array}{\|r\|r\|} \hline 2.38 \\ 60.32 \end{array}$ | $\begin{array}{\|c\|} \hline 2.00 \prime \prime \\ 50.8 \end{array}$ |
|  | $3.000^{\prime \prime}$ | $1.25^{\prime \prime}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $3.500^{\prime \prime}$ | $\begin{array}{\|l\|l\|} \hline 1.25^{\prime \prime} \\ 31.75{ }^{2} \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 4.000" ${ }^{101.6}$ | $\begin{array}{\|l\|} \hline 1.25^{\prime \prime} \\ 31.75 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { HB } 70 \\ 7.00^{\prime \prime} \text { Bore } \end{gathered}$ | ${ }_{76.2}^{3.00010}$ STD. | $\begin{aligned} & 1.25^{\prime \prime \prime} \\ & 31.75 \end{aligned}$ | $\begin{aligned} & 3.81^{\prime \prime} \\ & 96.83 \end{aligned}$ | $\left\|\begin{array}{r} 16.25^{\prime \prime} \\ 412.75 \end{array}\right\|$ | $\left\|\begin{array}{l} 13.755^{\prime \prime} \\ 349.25 \end{array}\right\|$ | $\left\|\begin{array}{l} 9.50^{\prime \prime \prime} \\ 241.3 \end{array}\right\|$ | $\begin{aligned} & 8.50^{\prime \prime} \\ & 215.9 \end{aligned}$ | $\text { \| } \begin{aligned} & 5.38{ }^{\prime \prime} \\ & 136.52 \end{aligned}$ | $\begin{aligned} & 1.00^{\prime \prime} \\ & 25.4 \end{aligned}$ | 1,1/4 | $\begin{aligned} & 2.75^{\prime \prime} \\ & 69.85 \end{aligned}$ | $\begin{aligned} & 2.75 \prime \prime \prime \\ & 69.85 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.25^{\prime \prime} \\ & 31.75 \end{aligned}$ | $\begin{gathered} 3.00 \prime \prime \\ 76.2 \end{gathered}$ | $\begin{array}{\|c} 2.50 " \prime \\ 63.5 \end{array}$ | $\begin{gathered} 3.00^{\prime \prime} \\ 76.2 \end{gathered}$ | $\begin{aligned} & 2.88^{\prime \prime} \\ & 73.02 \end{aligned}$ | $\begin{gathered} 2.50 " 1 \\ 63.5 \end{gathered}$ |
|  | $3.500^{\prime \prime}$ | $1.25^{\prime \prime}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ${ }_{\text {4.000" }}{ }^{101.6}$ | $1.25^{\prime \prime}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 5.000" 127 | $\begin{array}{\|l\|l\|} \hline 1.25 " \prime \\ 31.75 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { HB } 80 \\ 8.00^{\prime \prime} \text { Bore } \end{gathered}$ | $\underset{88.9}{ } 3.500$ STD. | $\begin{aligned} & 1.25^{\prime \prime \prime} \\ & 31.75 \end{aligned}$ | $\begin{array}{r} 3.94^{\prime \prime} \\ -100.0 \end{array}$ | $\begin{array}{\|l\|} 17.75^{\prime \prime} \\ 450.85 \end{array}$ | $\begin{array}{\|c\|c\|} \hline 15.0 \prime \prime \\ 381.0 \end{array}$ | $\begin{gathered} 10.50^{\prime \prime} \\ 266.7 \end{gathered}$ | $\left\lvert\, \begin{aligned} & 9.50 \prime \prime \\ & 241.3 \end{aligned}\right.$ | $\begin{aligned} & 6.13 \prime \prime \prime \\ & 155.57 \end{aligned}$ | $\begin{array}{l\|l\|} \hline 1.00 \\ 25.4 \end{array}$ | 1,1/2" | $\left\lvert\, \begin{gathered} 3.001 \mid \\ 76.2 \end{gathered}\right.$ | $\begin{aligned} & 3.00 " \prime \\ & 76.2 \end{aligned}$ |  | $\begin{array}{\|c\|} \hline 3.25^{\prime \prime} \\ 82.55 \end{array}$ | $\begin{aligned} & 2.75^{\prime \prime} \\ & 69.85 \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline 3.001 " \\ 76.2 \end{array}$ | $\left\lvert\, \begin{aligned} & 3.13 " \prime \\ & 79.37 \end{aligned}\right.$ | $\begin{array}{\|c} 3.00 " 1 \\ 76.2 \end{array}$ |
|  | $4.000^{\prime \prime}$ | $\begin{aligned} & 1.25^{\prime \prime} \\ & 31.75 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $5.000^{\prime \prime}$ | $\begin{array}{\|l\|l\|} \hline 1.25^{\prime \prime} \\ 31.75{ }^{\prime \prime} \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $5.500^{\prime \prime}$ | $\begin{array}{\|l\|l\|} \hline 1.25^{\prime \prime} \\ 311.75 \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



MALE ROD END SHOWN See sheet 4A for male \& female variations and dimensions

Single Slotted CUSH. ADJ.
Cross Slotted CUSH. Relief (Fixed)

| $\begin{gathered} C Y L I N D E R \\ \text { SIZE } \end{gathered}$ | $\begin{gathered} \text { ROD DIA. } \\ \text { E E } \end{gathered}$ | E | D | YA | YB | A | AA | B | H | J | R | YC | Y F | Y H | $\begin{gathered} D D \\ \varnothing \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { HB } 100 \\ \text { 10.00" BORE } \end{gathered}$ | 4.50" | $2.94^{\prime \prime}$ | $4.75^{\prime \prime}$ $120.65$ | $22.56^{\prime \prime}$ | $\begin{aligned} & 19.06^{\prime \prime \prime} \\ & 484.18 \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline 12.13 " \\ 307.97 \end{array}$ | $\begin{array}{\|c\|} \hline 12.63^{\prime \prime} \\ 320.67 \end{array}$ | $\left\lvert\, \begin{aligned} & 8.50^{\prime \prime} \\ & 215.90 \end{aligned}\right.$ | $\begin{gathered} 2.00^{\prime \prime} \\ \text { BSPP. } \end{gathered}$ | $\begin{aligned} & 3.69^{\prime \prime} \\ & 93.65 \end{aligned}$ | $\begin{array}{\|l\|} \hline 1.56 " \\ 39.68 \end{array}$ | $\begin{array}{\|c\|c\|} \hline 4.00 " 1 \\ 101.6 \end{array}$ | $\begin{array}{\|l\|l\|} \hline 4.00 \\ 101.6 \end{array}$ | $\begin{array}{\|c} 3.50^{\prime \prime} \\ 88.9 \end{array}$ | $\begin{gathered} 3.500^{\prime \prime} \\ 88.90 \end{gathered}$ |
|  | $\underset{127.0}{5.00^{\prime \prime} \text { STD. }}$ | $\begin{array}{\|l\|} \hline\left.3.19\right\|^{\prime} \\ 80.9 \end{array}$ | $\begin{aligned} & 5.00^{\prime \prime} \\ & 127.0 \end{aligned}$ | $\begin{array}{\|l\|} \hline 22.81^{\prime \prime} \\ 579.43 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 19.31^{\prime \prime} \\ 490.53 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |
|  | $5.50^{\prime \prime}$ | $\begin{aligned} & \hline 3.9^{\prime \prime} \\ & 80.95 \end{aligned}$ | $5.00^{\prime \prime}$ | $22.81^{\prime \prime}$ | $\begin{array}{\|l\|l\|} \hline 19.31^{\prime \prime} \end{array}$ |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 7.00^{\prime \prime} \\ & 177.8 \end{aligned}$ | $\begin{array}{\|c} \hline 3.50^{\prime \prime} \\ 88.9 \\ \hline \end{array}$ | $\begin{aligned} & \hline 5.31^{\prime \prime} \\ & 134.93 \\ & \hline \end{aligned}$ | $23.13^{\prime \prime}$ | $\begin{array}{\|c\|} \hline 19.63^{\prime \prime} \\ 498.47 \end{array}$ |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 5.50^{\prime \prime} \\ & 139.7 \end{aligned}$ | $\begin{aligned} & \hline 3.19^{\prime \prime} \\ & 80.95 \end{aligned}$ | $\begin{aligned} & 5.44^{\prime \prime} \\ & 138.09 \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline 26.19^{\prime \prime} \\ 665.15 \end{array}$ | $\begin{aligned} & \hline 22.19^{\prime \prime} \\ & 563.56 \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
| HB 120 | $\begin{gathered} 7.00^{\prime \prime} \text { STD. } \\ \hline 17.8 . \end{gathered}$ | $\begin{array}{\|l\|} \hline 3.50^{\prime \prime} \\ 88.9 \end{array}$ | $\begin{aligned} & 5.75^{\prime \prime} \\ & 146.05 \end{aligned}$ | $\begin{gathered} 26.5011 \\ 673.10 \end{gathered}$ | $\begin{gathered} 22.50 " 1 \\ 571.50 \\ \hline \end{gathered}$ | $14.5^{\prime \prime}$ | 14.88" | $10.00$ | $2.50^{\prime \prime}$ | $4.44^{\prime \prime}$ | $2.09^{\prime \prime}$ | $4.50 "$ | $4.50^{\prime \prime}$ | $4.00^{\prime \prime}$ <br> 101.6 | $4.000{ }^{\prime \prime}$ |
| 12.00" Bore | $\begin{aligned} & 8.00^{\prime \prime} \\ & 203.2 \end{aligned}$ | $\begin{array}{\|c\|c\|} \hline 4.00^{\prime \prime} \\ 1010 \end{array}$ | $\begin{aligned} & \hline 6.25^{\prime \prime} \\ & 158.75 \\ & \hline \end{aligned}$ | $\begin{gathered} 27.00^{\prime \prime} \\ 685.80 \\ \hline \end{gathered}$ | $\begin{gathered} 23.00 " \prime \prime \\ 584.20 \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |

