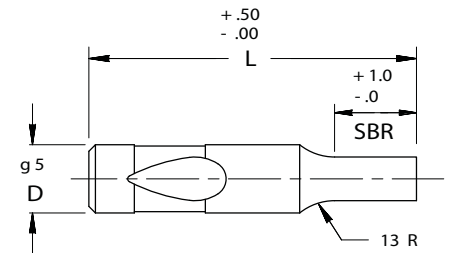
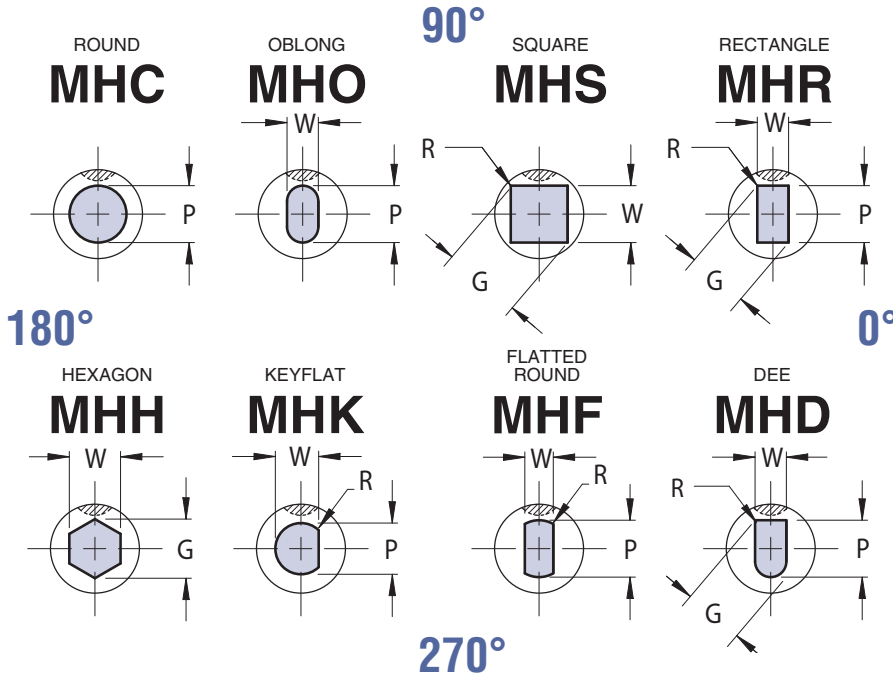


# BALL LOCK PUNCHES



## HEAVY DUTY/SOLID



**ORDER EXAMPLE:**  
 (Reference page 4)  
**SPECIFY:** QTY: TYPE "D" "L" POINT LENGTH P(OR P&W) DIMENSIONS  
 EXAMPLE: 6 MHC 13 90 C 8.0  
 EXAMPLE: 6 MHO 16 80 STD 14.0 x 7.0  
 Note: When ordering, standard quantity breaks are: 1, 2-3, 4-11, 12-23, 24-49, 50-99

VIEWS ARE SHOWN LOOKING THROUGH THE SHANK BUT DRAWN WITH SOLID LINES FOR CLARITY.

Complete design & CAD files visit [WWW.MOELLERMCAD.COM](http://WWW.MOELLERMCAD.COM)

FOR STANDARD ALTERATIONS SEE PAGES 59-63.

| CATALOG TYPE | SHANK DIA D | ROUND         | SHAPE |         | OVERALL LENGTH "L" |    |    |     |     |     |
|--------------|-------------|---------------|-------|---------|--------------------|----|----|-----|-----|-----|
|              |             | RANGE P       | MIN W | MAX G/P | 71                 | 80 | 90 | 100 | 110 | 125 |
| MH_10        | 10          | 2.50 - 9.98   | 2.50  | 10.00   | X                  | X  | X  | X   | X   | X   |
| MH_13        | 13          | 5.00 - 12.98  | 4.50  | 13.00   | X                  | X  | X  | X   | X   | X   |
| MH_16        | 16          | 8.00 - 15.98  | 6.00  | 16.00   | X                  | X  | X  | X   | X   | X   |
| MH_20        | 20          | 12.00 - 19.98 | 8.00  | 20.00   | X                  | X  | X  | X   | X   | X   |
| MH_25        | 25          | 16.00 - 24.98 | 10.00 | 25.00   |                    | X  | X  | X   | X   | X   |
| MH_32        | 32          | 24.00 - 31.98 | 12.00 | 32.00   |                    | X  | X  | X   | X   | X   |
| MH_40        | 40          | 30.00 - 39.98 | 14.00 | 40.00   |                    | X  | X  | X   | X   | X   |

**Material**  
 Steel: M2, HRC 60-63

**Standard Point Tolerance**

Round P  $\begin{matrix} +.01 \\ -.00 \end{matrix}$  .01 P to D

Shape P, W  $\pm .01$  .02 P to D

When P = D Shank Tolerances Apply

| CATALOG TYPE | SHANK D | SBR       |            |    |
|--------------|---------|-----------|------------|----|
|              |         | NAPMA STD | ALTERNATES |    |
|              |         |           | B          | C  |
| MH_10        | 10      | 19        | 10         | —  |
| MH_13        | 13      | 19        | 13         | 25 |
| MH_16        | 16      | 19        | 13         | 25 |
| MH_20        | 20      | 19        | 13         | 25 |
| MH_25        | 25      | 19        | 13         | 25 |
| MH_32        | 32      | 19        | 13         | 25 |
| MH_40        | 40      | 25        | 19         | 30 |

L=71 SBR MAX=19

STANDARD BALL SEAT LOCATION IS AT 90° AS SHOWN. AVAILABLE AT 0°, 180°, 270°, FOR SAME PRICE.