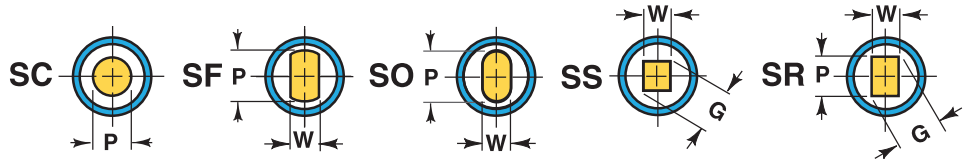
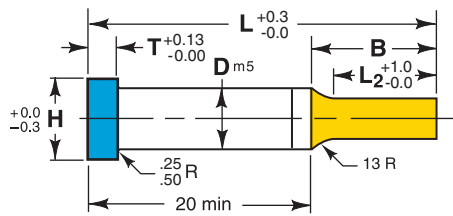


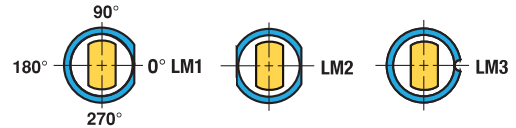
# PORTER Standard Headed Punches (S-)



**Ordering Example:** Qty Steel Type Code L<sub>2</sub>/L W P Locate  
25 M2 SO 013 2590 6.00 x 12.00 LM2

For additional standard forms and configurations see pages 32 and 33.

### Reflected View



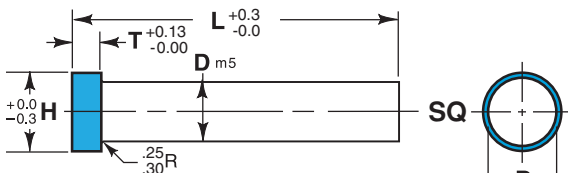
Optional Locating Methods See Page 38 for details and options.

| Shank |          | Head |   | L <sub>2</sub> |      | Lengths L |    |    |    |    |    |    |    |    |     | Point |     |     |               |         |       |
|-------|----------|------|---|----------------|------|-----------|----|----|----|----|----|----|----|----|-----|-------|-----|-----|---------------|---------|-------|
| D mm  | Code No. | H    | T | Std.           | Alt. | 45        | 50 | 56 | 60 | 63 | 70 | 71 | 80 | 90 | 100 | 110   | 125 | 150 | Round Range P | Shape   |       |
|       |          |      |   |                |      |           |    |    |    |    |    |    |    |    |     |       |     |     | Min W         | Max P/G |       |
| 4     | 004      | 7    | 5 | 8              | 13   | ●         | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   |       |     |     | 1.60 – 3.99   | 1.60    | 4.00  |
| 5     | 005      | 8    | 5 | 13             | 19   | ◆         | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   |       |     |     | 1.60 – 4.99   | 1.60    | 5.00  |
| 6     | 006      | 9    | 5 | 13             | 19   | ◆         | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   |       |     |     | 1.60 – 5.99   | 1.60    | 6.00  |
| 8     | 008      | 11   | 5 | 19             | 25   |           | ◆  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   |     | 2.50 – 7.99   | 2.50    | 8.00  |
| 10    | 010      | 13   | 5 | 19             | 25   |           | ◆  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 3.20 – 9.99   | 3.20    | 10.00 |
| 13    | 013      | 16   | 5 | 19             | 25   |           | ◆  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 5.00 – 12.99  | 4.50    | 13.00 |
| 16    | 016      | 19   | 5 | 19             | 25   |           | ◆  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 8.00 – 15.99  | 6.00    | 16.00 |
| 20    | 020      | 23   | 5 | 19             | 25   |           | ◆  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 10.00 – 19.99 | 8.00    | 20.00 |
| 22    | 022      | 25   | 5 | 19             | 25   |           | ◆  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 11.00 – 21.99 | 8.50    | 22.00 |
| 25    | 025      | 28   | 5 | 19             | 25   |           | ◆  | ●  | ●  | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 12.00 – 24.99 | 9.00    | 25.00 |
| 32    | 032      | 35   | 5 | 25             | 30   |           |    |    |    | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 16.00 – 31.99 | 10.00   | 32.00 |
| 40    | 040      | 43   | 5 | 25             | 30   |           |    |    |    | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 20.00 – 39.99 | 10.00   | 40.00 |
| 45    | 045      | 48   | 5 | 25             | 30   |           |    |    |    | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 25.00 – 44.99 | 10.00   | 45.00 |
| 50    | 050      | 53   | 5 | 25             | 30   |           |    |    |    | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 30.00 – 49.99 | 10.00   | 50.00 |
| 56    | 056      | 59   | 5 | 25             | 30   |           |    |    |    | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 35.00 – 55.99 | 11.00   | 56.00 |
| 63    | 063      | 66   | 5 | 25             | 30   |           |    |    |    | ●  | ●  | ●  | ●  | ●  | ●   | ●     | ●   | ●   | 40.00 – 62.99 | 12.00   | 63.00 |

◆ or ◆ only available in Standard Point Length  
◆ or ● these sizes also available in PM4 Material.

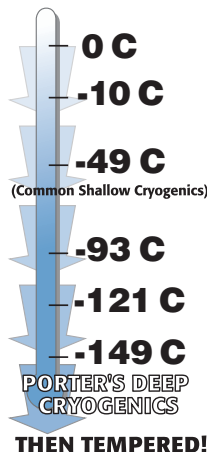
All Lengths 110 mm and under in Light Blue Panel have Hot Forged Heads for added strength and toughness.

# PORTER Standard Head Punch Blanks (SQ)



**Ordering Example:** Qty Steel Type Code L<sub>2</sub>/L  
25 M2 SQ 008 1956

Standard Alterations are changes that are beyond the ranges listed in the catalog that can be altered for a minimal charge. See page 37.



All Porter Standard Punches up to 25 mm Dia. are "Deep Cryogenically" treated for  
1. Wear  
2. Toughness  
3. Dimensional Stability  
See page 42 for more details.

Steel: D2 L ≤ 100, M2 Rc 60-63  
PM4, Rc 63-65  
Heads Rc 40-55 (25mm Ø and smaller and L ≥ 50)

### TOLERANCES

Round P  $\begin{matrix} +0.01 \\ -0.00 \end{matrix}$   $\text{Ⓢ} 0.01$  P to D  
Shape P, W  $\pm 0.01$   $\text{Ⓢ} 0.02$  P, W to D

Manufactured to ISO and NAPMA standards where applicable.

Back Draft 0.1/100mm L<sub>2</sub> max.