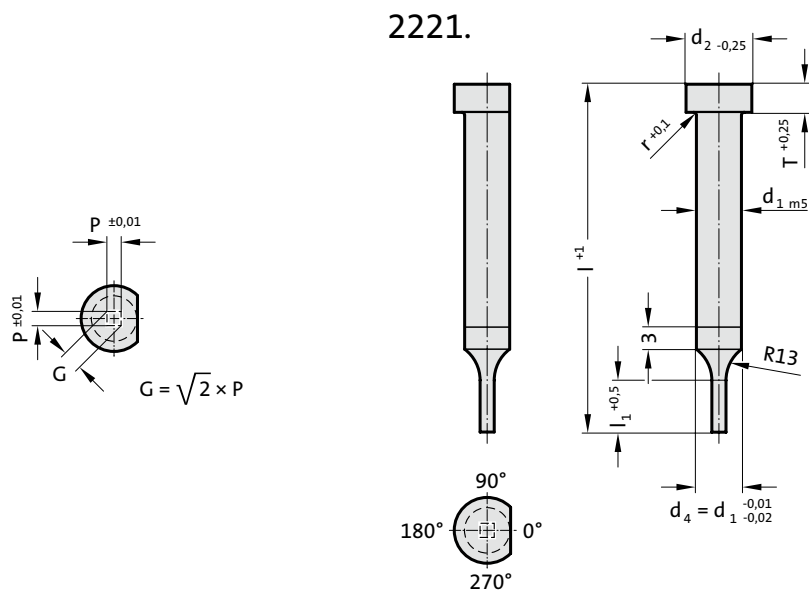


PUNCH, STEPPED, SQUARE, ISO 8020

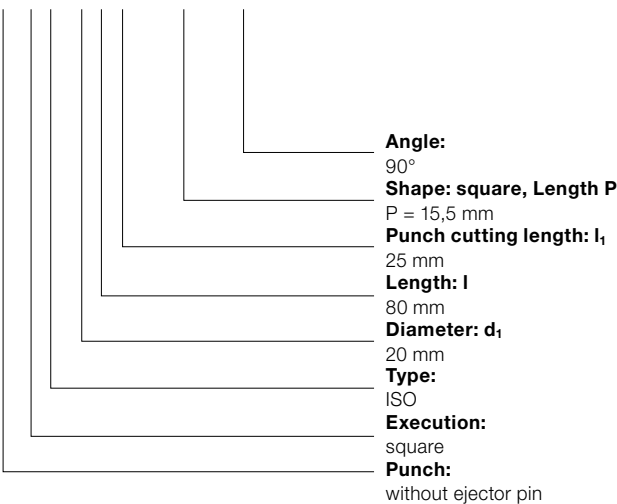


2221. Punch, stepped, square, ISO 8020

| d <sub>1</sub> / Order No | d <sub>2</sub> | P <sub>min</sub> | G <sub>max</sub> | l <sub>1</sub> / Order No | r    | T | l / (Order Code character) | 71<br>(D) | 80<br>(E) | 90<br>(F) | 100<br>(G) | 120<br>(J) |
|---------------------------|----------------|------------------|------------------|---------------------------|------|---|----------------------------|-----------|-----------|-----------|------------|------------|
| 3 / (1)                   | 5              | 0.5              | 2.9              | 8 (1) 10 (2)              | 0.25 | 3 |                            | ●         | ●         | ●         | ●          | ●          |
| 4 / (2)                   | 6              | 0.8              | 3.9              | 8 (1) 13 (3)              | 0.25 | 3 |                            | ●         | ●         | ●         | ●          | ●          |
| 5 / (3)                   | 8              | 1                | 4.9              | 13 (3) 19 (4)             | 0.3  | 5 |                            | ●         | ●         | ●         | ●          | ●          |
| 6 / (4)                   | 9              | 1.6              | 5.9              | 13 (3) 19 (4)             | 0.3  | 5 |                            | ●         | ●         | ●         | ●          | ●          |
| 8 / (5)                   | 11             | 2                | 7.9              | 19 (4) 25 (5)             | 0.3  | 5 |                            | ●         | ●         | ●         | ●          | ●          |
| 10 / (6)                  | 13             | 3.5              | 9.9              | 19 (4) 25 (5)             | 0.3  | 5 |                            | ●         | ●         | ●         | ●          | ●          |
| 13 / (7)                  | 16             | 4.5              | 12.9             | 19 (4) 25 (5)             | 0.4  | 5 |                            | ●         | ●         | ●         | ●          | ●          |
| 16 / (8)                  | 19             | 6                | 15.9             | 19 (4) 25 (5)             | 0.4  | 5 |                            | ●         | ●         | ●         | ●          | ●          |
| 20 / (9)                  | 23             | 8                | 19.9             | 19 (4) 25 (5)             | 0.4  | 5 |                            | ●         | ●         | ●         | ●          | ●          |
| 25 / (10)                 | 28             | 10               | 24.9             | 19 (4) 25 (5)             | 0.4  | 5 |                            | ●         | ●         | ●         | ●          | ●          |
| 32 / (11)                 | 35             | 10               | 31.9             | 25 (5) 30 (6)             | 0.4  | 5 |                            | ●         | ●         | ●         | ●          | ●          |

Ordering Code (example):

2221.9E5.1550.B



**Order Code character**  
= (B)

**Order No**  
= 1550

**Order Code character**  
= (E)

**Order No**  
= (9)

**Order Code character**  
= (1)

**Order No**  
= (2)

**Order Code character**  
= (2)

Material:

HSS  
Hardness:  
Shaft 64 ± 2 HRC  
Head 52 ± 5 HRC

ASP 23 - ASP 2023

upon request

☞ Description of FIBRO materials for tool and die components see at the beginning of Chapter E.

Execution:

Punch head hot upset-forged. Shoulder, shaft and punch shape fine ground.  
The anti-rotation surface parallel to P = 0° as standard.  
Special dimensions on request.

Note:

With kerf ≤ 0.04 mm, FIBRO rounds off sharp edges if the punch and piercing die bush are ordered together. This reduces the fitting time and the risk of an edge break during operation.