

Poraholkit • ilman kaulusta (olaketta), DIN 179 A  
EH 23112.



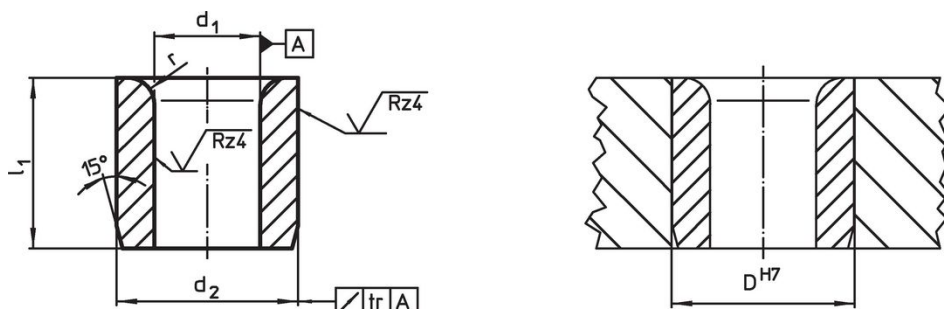
Tuotekuvaus

Poraholkeja käytetään varmistamaan toistotarkkuus porattaessa toistuvasti reikiä samassa paikassa.  
Karkaistuja ja hiottuja poraholkeja voidaan käyttää kulutusta kestävinä ohjureina porauksissa, akseleille jne.

Materiaali


- Hiiletyskarkaistu teräs, hehkutettu


Piirustus



Tilaustiedot

| Ulkomitat            |                        |                      |     | Kiinnitysporaus |     | Til.nro    |
|----------------------|------------------------|----------------------|-----|-----------------|-----|------------|
| d <sub>1</sub><br>F7 | l <sub>1</sub><br>[mm] | d <sub>2</sub><br>n6 | r   | D<br>H7<br>[mm] | [g] |            |
| 2,0                  | 6                      | 5                    | 1,0 | 5               | 0,7 | 23112.0520 |
| 2,0                  | 9                      | 5                    | 1,0 | 5               | 1,1 | 23112.0521 |
| 2,1                  | 6                      | 5                    | 1,0 | 5               | 0,7 | 23112.0522 |
| 2,1                  | 9                      | 5                    | 1,0 | 5               | 1,1 | 23112.0523 |
| 2,5                  | 6                      | 5                    | 1,0 | 5               | 0,7 | 23112.0524 |
| 2,5                  | 9                      | 5                    | 1,0 | 5               | 1,0 | 23112.0525 |
| 3,0                  | 8                      | 6                    | 1,0 | 6               | 1,9 | 23112.0530 |
| 3,0                  | 12                     | 6                    | 1,0 | 6               | 1,9 | 23112.0531 |
| 3,0                  | 16                     | 6                    | 1,0 | 6               | 2,6 | 23112.0532 |
| 3,1                  | 8                      | 6                    | 1,0 | 6               | 1,2 | 23112.0533 |
| 3,1                  | 12                     | 6                    | 1,0 | 6               | 1,9 | 23112.0534 |
| 3,1                  | 16                     | 6                    | 1,0 | 6               | 3,2 | 23112.0535 |
| 3,5                  | 8                      | 7                    | 1,0 | 7               | 2,4 | 23112.0536 |
| 3,5                  | 12                     | 7                    | 1,0 | 7               | 2,6 | 23112.0537 |
| 3,5                  | 16                     | 7                    | 1,0 | 7               | 3,6 | 23112.0538 |
| 4,0                  | 8                      | 7                    | 1,0 | 7               | 1,5 | 23112.0540 |
| 4,0                  | 12                     | 7                    | 1,0 | 7               | 3,0 | 23112.0541 |
| 4,0                  | 16                     | 7                    | 1,0 | 7               | 3,2 | 23112.0542 |
| 4,1                  | 8                      | 8                    | 1,0 | 8               | 2,2 | 23112.0543 |
| 4,1                  | 12                     | 8                    | 1,0 | 8               | 3,4 | 23112.0544 |
| 4,1                  | 16                     | 8                    | 1,0 | 8               | 4,6 | 23112.0545 |
| 4,5                  | 8                      | 8                    | 1,0 | 8               | 2,1 | 23112.0546 |
| 4,5                  | 12                     | 8                    | 1,0 | 8               | 3,1 | 23112.0547 |
| 4,5                  | 16                     | 8                    | 1,0 | 8               | 4,2 | 23112.0548 |
| 5,0                  | 8                      | 8                    | 1,0 | 8               | 1,8 | 23112.0550 |
| 5,0                  | 12                     | 8                    | 1,0 | 8               | 3,4 | 23112.0551 |
| 5,0                  | 16                     | 8                    | 1,0 | 8               | 3,7 | 23112.0552 |
| 5,1                  | 10                     | 10                   | 1,5 | 10              | 4,4 | 23112.0553 |
| 5,1                  | 16                     | 10                   | 1,5 | 10              | 7,1 | 23112.0554 |
| 5,1                  | 20                     | 10                   | 1,5 | 10              | 8,9 | 23112.0555 |
| 5,5                  | 10                     | 10                   | 1,5 | 10              | 4,1 | 23112.0556 |

| d <sub>1</sub><br>F7 | Ulkomitat              |                      |  | r   | Kiinnitysporaus<br>D<br>H7<br>[mm] | <br>[g] | Til.nro    |
|----------------------|------------------------|----------------------|--|-----|------------------------------------|--|------------|
|                      | l <sub>1</sub><br>[mm] | d <sub>2</sub><br>n6 |  |     |                                    |  |            |
| 5,5                  | 16                     | 10                   |  | 1,5 | 10                                 | 6,7  | 23112.0557 |
| 5,5                  | 20                     | 10                   |  | 1,5 | 10                                 | 8,4  | 23112.0558 |
| 6,0                  | 10                     | 10                   |  | 1,5 | 10                                 | 3,8  | 23112.0560 |
| 6,0                  | 16                     | 10                   |  | 1,5 | 10                                 | 6,1  | 23112.0561 |
| 6,0                  | 20                     | 10                   |  | 1,5 | 10                                 | 7,7  | 23112.0562 |
| 6,1                  | 10                     | 12                   |  | 1,5 | 12                                 | 6,3  | 23112.0563 |
| 6,1                  | 16                     | 12                   |  | 1,5 | 12                                 | 10,0   | 23112.0564 |
| 6,1                  | 20                     | 12                   |  | 1,5 | 12                                 | 13,0   | 23112.0565 |
| 6,5                  | 10                     | 12                   |  | 1,5 | 12                                 | 6,0  | 23112.0566 |
| 6,5                  | 16                     | 12                   |  | 1,5 | 12                                 | 9,7  | 23112.0567 |
| 6,5                  | 20                     | 12                   |  | 1,5 | 12                                 | 12,0   | 23112.0568 |
| 7,0                  | 10                     | 12                   |  | 1,5 | 12                                 | 5,6  | 23112.0570 |
| 7,0                  | 16                     | 12                   |  | 1,5 | 12                                 | 9,1  | 23112.0571 |
| 7,0                  | 20                     | 12                   |  | 1,5 | 12                                 | 11,0   | 23112.0572 |
| 7,1                  | 10                     | 12                   |  | 1,5 | 12                                 | 5,5  | 23112.0573 |
| 7,1                  | 16                     | 12                   |  | 1,5 | 12                                 | 9,0  | 23112.0574 |
| 7,1                  | 20                     | 12                   |  | 1,5 | 12                                 | 11,0   | 23112.0575 |
| 7,5                  | 10                     | 12                   |  | 1,5 | 12                                 | 5,1  | 23112.0576 |
| 7,5                  | 16                     | 12                   |  | 1,5 | 12                                 | 8,4  | 23112.0577 |
| 7,5                  | 20                     | 12                   |  | 1,5 | 12                                 | 11,0   | 23112.0578 |
| 8,0                  | 10                     | 12                   |  | 1,5 | 12                                 | 4,7  | 23112.0580 |
| 8,0                  | 16                     | 12                   |  | 1,5 | 12                                 | 7,6  | 23112.0581 |
| 8,0                  | 20                     | 12                   |  | 1,5 | 12                                 | 9,6  | 23112.0582 |
| 8,1                  | 12                     | 15                   |  | 2,0 | 15                                 | 11,0   | 23112.0583 |
| 8,1                  | 20                     | 15                   |  | 2,0 | 15                                 | 19,0   | 23112.0584 |
| 8,1                  | 25                     | 15                   |  | 2,0 | 15                                 | 24,0   | 23112.0585 |
| 8,5                  | 12                     | 15                   |  | 2,0 | 15                                 | 11,0   | 23112.0586 |
| 8,5                  | 20                     | 15                   |  | 2,0 | 15                                 | 18,0   | 23112.0587 |
| 8,5                  | 25                     | 15                   |  | 2,0 | 15                                 | 23,0   | 23112.0588 |
| 9,0                  | 12                     | 15                   |  | 2,0 | 15                                 | 10,0   | 23112.0590 |
| 9,0                  | 20                     | 15                   |  | 2,0 | 15                                 | 17,0   | 23112.0591 |
| 9,0                  | 25                     | 15                   |  | 2,0 | 15                                 | 22,0   | 23112.0592 |
| 9,1                  | 12                     | 15                   |  | 2,0 | 15                                 | 10,0   | 23112.0593 |
| 9,1                  | 20                     | 15                   |  | 2,0 | 15                                 | 17,0   | 23112.0594 |
| 9,1                  | 25                     | 15                   |  | 2,0 | 15                                 | 21,0   | 23112.0595 |
| 9,5                  | 12                     | 15                   |  | 2,0 | 15                                 | 9,5  | 23112.0596 |
| 9,5                  | 20                     | 15                   |  | 2,0 | 15                                 | 16,0   | 23112.0597 |
| 9,5                  | 25                     | 15                   |  | 2,0 | 15                                 | 20,0   | 23112.0598 |
| 10,0                 | 12                     | 15                   |  | 2,0 | 15                                 | 8,8  | 23112.0600 |
| 10,0                 | 20                     | 15                   |  | 2,0 | 15                                 | 15,0   | 23112.0601 |
| 10,0                 | 25                     | 15                   |  | 2,0 | 15                                 | 19,0   | 23112.0602 |
| 10,1                 | 12                     | 18                   |  | 2,0 | 18                                 | 16,0   | 23112.0603 |
| 10,1                 | 20                     | 18                   |  | 2,0 | 18                                 | 27,0   | 23112.0604 |
| 10,1                 | 25                     | 18                   |  | 2,0 | 18                                 | 33,0   | 23112.0605 |
| 10,5                 | 12                     | 18                   |  | 2,0 | 18                                 | 15,0   | 23112.0606 |
| 10,5                 | 20                     | 18                   |  | 2,0 | 18                                 | 26,0   | 23112.0607 |
| 10,5                 | 25                     | 18                   |  | 2,0 | 18                                 | 32,0   | 23112.0608 |
| 11,0                 | 12                     | 18                   |  | 2,0 | 18                                 | 14,0   | 23112.0610 |
| 11,0                 | 20                     | 18                   |  | 2,0 | 18                                 | 24,0   | 23112.0611 |
| 11,0                 | 25                     | 18                   |  | 2,0 | 18                                 | 31,0   | 23112.0612 |
| 11,1                 | 12                     | 18                   |  | 2,0 | 18                                 | 14,0   | 23112.0613 |
| 11,1                 | 20                     | 18                   |  | 2,0 | 18                                 | 24,0   | 23112.0614 |
| 11,1                 | 25                     | 18                   |  | 2,0 | 18                                 | 30,0   | 23112.0615 |
| 11,5                 | 12                     | 18                   |  | 2,0 | 18                                 | 13,0   | 23112.0616 |
| 11,5                 | 20                     | 18                   |  | 2,0 | 18                                 | 23,0   | 23112.0617 |
| 11,5                 | 25                     | 18                   |  | 2,0 | 18                                 | 29,0   | 23112.0618 |
| 12,0                 | 12                     | 18                   |  | 2,0 | 18                                 | 13,0   | 23112.0620 |
| 12,0                 | 20                     | 18                   |  | 2,0 | 18                                 | 22,0   | 23112.0621 |
| 12,0                 | 25                     | 18                   |  | 2,0 | 18                                 | 27,0   | 23112.0622 |
| 12,1                 | 16                     | 22                   |  | 2,0 | 22                                 | 32,0   | 23112.0623 |
| 12,1                 | 28                     | 22                   |  | 2,0 | 22                                 | 57,0   | 23112.0624 |

| d <sub>1</sub><br>F7 | Ulkomitat              |                      |  | r   | Kiinnitysporaus<br>D<br>H7<br>[mm] | <br>[g] | Til.nro                    |
|----------------------|------------------------|----------------------|--|-----|------------------------------------|--|----------------------------|
|                      | l <sub>1</sub><br>[mm] | d <sub>2</sub><br>n6 |  |     |                                    |  |                            |
| 12,1                 | 36                     | 22                   |  | 2,0 | 22                                 | 74,0   | <a href="#">23112.0625</a> |
| 12,5                 | 16                     | 22                   |  | 2,0 | 22                                 | 31,0   | <a href="#">23112.0626</a> |
| 12,5                 | 28                     | 22                   |  | 2,0 | 22                                 | 66,0   | <a href="#">23112.0627</a> |
| 12,5                 | 36                     | 22                   |  | 2,0 | 22                                 | 69,0   | <a href="#">23112.0628</a> |
| 13,0                 | 16                     | 22                   |  | 2,0 | 22                                 | 30,0   | <a href="#">23112.0630</a> |
| 13,0                 | 28                     | 22                   |  | 2,0 | 22                                 | 53,0   | <a href="#">23112.0631</a> |
| 13,0                 | 36                     | 22                   |  | 2,0 | 22                                 | 69,0   | <a href="#">23112.0632</a> |
| 14,0                 | 16                     | 22                   |  | 2,0 | 22                                 | 27,0   | <a href="#">23112.0640</a> |
| 14,0                 | 28                     | 22                   |  | 2,0 | 22                                 | 49,0   | <a href="#">23112.0641</a> |
| 14,0                 | 36                     | 22                   |  | 2,0 | 22                                 | 63,0   | <a href="#">23112.0642</a> |
| 15,0                 | 16                     | 22                   |  | 2,0 | 22                                 | 24,0   | <a href="#">23112.0650</a> |
| 15,0                 | 28                     | 22                   |  | 2,0 | 22                                 | 44,0   | <a href="#">23112.0651</a> |
| 15,0                 | 36                     | 22                   |  | 2,0 | 22                                 | 56,0   | <a href="#">23112.0652</a> |
| 16,0                 | 16                     | 26                   |  | 2,0 | 26                                 | 45,0   | <a href="#">23112.0660</a> |
| 16,0                 | 28                     | 26                   |  | 2,0 | 26                                 | 71,0   | <a href="#">23112.0661</a> |
| 16,0                 | 36                     | 26                   |  | 2,0 | 26                                 | 92,0   | <a href="#">23112.0662</a> |
| 16,1                 | 16                     | 26                   |  | 2,0 | 26                                 | 40,0   | <a href="#">23112.0663</a> |
| 16,1                 | 28                     | 26                   |  | 2,0 | 26                                 | 71,0   | <a href="#">23112.0664</a> |
| 16,1                 | 36                     | 26                   |  | 2,0 | 26                                 | 91,0   | <a href="#">23112.0665</a> |
| 16,5                 | 16                     | 26                   |  | 2,0 | 26                                 | 39,0   | <a href="#">23112.0666</a> |
| 16,5                 | 28                     | 26                   |  | 2,0 | 26                                 | 68,0   | <a href="#">23112.0667</a> |
| 16,5                 | 36                     | 26                   |  | 2,0 | 26                                 | 88,0   | <a href="#">23112.0668</a> |
| 17,0                 | 16                     | 26                   |  | 2,0 | 26                                 | 37,0   | <a href="#">23112.0671</a> |
| 17,0                 | 28                     | 26                   |  | 2,0 | 26                                 | 65,0   | <a href="#">23112.0672</a> |
| 17,0                 | 36                     | 26                   |  | 2,0 | 26                                 | 84,0   | <a href="#">23112.0673</a> |
| 18,0                 | 16                     | 26                   |  | 2,0 | 26                                 | 33,0   | <a href="#">23112.0681</a> |
| 18,0                 | 28                     | 26                   |  | 2,0 | 26                                 | 59,0   | <a href="#">23112.0682</a> |
| 18,0                 | 36                     | 26                   |  | 2,0 | 26                                 | 76,0   | <a href="#">23112.0683</a> |
| 19,0                 | 20                     | 30                   |  | 3,0 | 30                                 | 64,0   | <a href="#">23112.0691</a> |
| 19,0                 | 36                     | 30                   |  | 3,0 | 30                                 | 117,0  | <a href="#">23112.0692</a> |
| 19,0                 | 45                     | 30                   |  | 3,0 | 30                                 | 147,0  | <a href="#">23112.0693</a> |
| 20,0                 | 20                     | 30                   |  | 3,0 | 30                                 | 59,0   | <a href="#">23112.0701</a> |
| 20,0                 | 36                     | 30                   |  | 3,0 | 30                                 | 108,0  | <a href="#">23112.0702</a> |
| 20,0                 | 45                     | 30                   |  | 3,0 | 30                                 | 136,0  | <a href="#">23112.0703</a> |
| 20,1                 | 20                     | 30                   |  | 3,0 | 30                                 | 59,0   | <a href="#">23112.0704</a> |
| 20,1                 | 36                     | 30                   |  | 3,0 | 30                                 | 108,0  | <a href="#">23112.0705</a> |
| 20,1                 | 45                     | 30                   |  | 3,0 | 30                                 | 135,0  | <a href="#">23112.0706</a> |
| 22,0                 | 20                     | 30                   |  | 3,0 | 30                                 | 49,0   | <a href="#">23112.0721</a> |
| 22,0                 | 36                     | 30                   |  | 3,0 | 30                                 | 90,0   | <a href="#">23112.0722</a> |
| 22,0                 | 45                     | 30                   |  | 3,0 | 30                                 | 113,0  | <a href="#">23112.0723</a> |
| 25,0                 | 20                     | 35                   |  | 3,0 | 35                                 | 71,0   | <a href="#">23112.0751</a> |
| 25,0                 | 36                     | 35                   |  | 3,0 | 35                                 | 130,0  | <a href="#">23112.0752</a> |
| 25,0                 | 45                     | 35                   |  | 3,0 | 35                                 | 163,0  | <a href="#">23112.0753</a> |
| 30,0                 | 25                     | 42                   |  | 3,0 | 42                                 | 129,0  | <a href="#">23112.0801</a> |
| 30,0                 | 45                     | 42                   |  | 3,0 | 42                                 | 235,0  | <a href="#">23112.0802</a> |
| 30,0                 | 56                     | 42                   |  | 3,0 | 42                                 | 293,0  | <a href="#">23112.0803</a> |

## Vaatimuksenmukaisuus

### RoHS-yhteensopiva

Sisältää lyijyä - yhteensopiva poikkeusten 6a / 6b / 6c mukaisesti

### Sisältää SVHC-aineita > 0,1 % w/w

Sisältää lyijyä - SVHC-luettelo 27.06.2024.

### Sisältää Prop 65 aineita



Lyijylle altistuminen voi aiheuttaa syöpää ja lisääntymiselle haitallisia vaikutuksia.

<https://www.P65Warnings.ca.gov/>

### Ei sisällä konfliktimineraaleja

Tämä tuote ei sisällä "konfliktimineraaleiksi" luokiteltuja aineita, kuten tantaalia, tinaa, kulta tai volframia Kongon demokraattisesta tasavallasta tai sen naapurimaista."