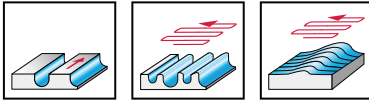


Fraise à copier de finition F 2139



- pour usinage à grande vitesse
- 1 arêtes de coupe par plaquette amovible
- forme de base des plaquettes positive

| Outil | Désignation | D _c mm | R mm | d ₁ mm | l ₃ mm | l ₄ mm | l ₁ mm | Z | kg | Nb. PL | Type de plaquette |
|--|-----------------------|----------------------|---------|----------------------|----------------------|----------------------|----------------------|------|-----|--------|----------------------|
| NCT ScrewFit | F2139.T09.008.Z02.04 | 8 | 4 | T09 | | 20 | | 2 | 0,1 | 1 | P 32... - D 08 |
| | F2139.T09.010.Z02.05 | 10 | 5 | T09 | | 25 | | 2 | 0,1 | 1 | P 32... - D 10 |
| | F2139.T09.012.Z02.06 | 12 | 6 | T09 | | 25 | | 2 | 0,1 | 1 | P 32... - D 12 |
| | F2139.T14.012.Z02.06 | 12 | 6 | T14 | | 25 | | 2 | 0,1 | 1 | |
| | F2139.T14.016.Z02.08 | 16 | 8 | T14 | | 25 | | 2 | 0,1 | 1 | P 32... - D 16 |
| | F2139.T18.020.Z02.10 | 20 | 10 | T18 | | 30 | | 2 | 0,1 | 1 | P 32... - D 20 |
| | F2139.T22.025.Z02.12 | 25 | 12,5 | T22 | | 35 | | 2 | 0,1 | 1 | P 32... - D 25 |
| | F2139.T28.030.Z02.15 | 30 | 15 | T28 | | 40 | | 2 | 0,2 | 1 | P 32... - D 30 |
| | F2139.T28.032.Z02.16 | 32 | 16 | T28 | | 40 | | 2 | 0,2 | 1 | P 32... - D 32 |
| | Queue DIN 228 A | F2139.5.01.040.10 | 10 | 5 | MK 1 | | 40 | 93,5 | 2 | 0,1 | 1 |
| F2139.5.01.040.12 | | 12 | 6 | MK 1 | | 40 | 93,5 | 2 | 0,2 | 1 | P 32... - D 12 |
| F2139.5.02.060.16 | | 16 | 8 | MK 2 | | 60 | 124 | 2 | 0,3 | 1 | P 32... - D 16 |
| F2139.5.02.061.20 | | 20 | 10 | MK 2 | | 61 | 125 | 2 | 0,6 | 1 | P 32... - D 20 |
| F2139.5.03.064.25 | | 25 | 12,5 | MK 3 | | 64 | 145 | 2 | 1,1 | 1 | P 32... - D 25 |
| F2139.5.04.062.30 | | 30 | 15 | MK 4 | | 62,5 | 165 | 2 | 1,9 | 1 | P 32... - D 30 |
| F2139.5.04.062.32 | | 32 | 16 | MK 4 | | 62,5 | 165 | 2 | 1,9 | 1 | P 32... - D 32 |
| Queue DIN 1835-B | | F2139.5.12.140.08 | 8 | 4 | 12 | 11 | 94 | 140 | 2 | 0,1 | 1 |
| | F2139.5.12.150.10 | 10 | 5 | 12 | 15 | 104 | 150 | 2 | 0,1 | 1 | P 32... - D 10 |
| | F2139.5.16.160.12 | 12 | 6 | 16 | 20 | 111 | 160 | 2 | 0,1 | 1 | P 32... - D 12 |
| | F2139.5.20.175.16 | 16 | 8 | 20 | 26 | 124 | 175 | 2 | 0,2 | 1 | P 32... - D 16 |
| | F2139.5.25.190.20 | 20 | 10 | 25 | 18 | 133 | 190 | 2 | 0,3 | 1 | P 32... - D 20 |
| | F2139.5.32.210.25 | 25 | 12,5 | 32 | 31 | 149 | 210 | 2 | 0,3 | 1 | P 32... - D 25 |
| | F2139.5.40.240.30 | 30 | 15 | 40 | 25 | 169 | 240 | 2 | 0,9 | 1 | P 32... - D 30 |
| | F2139.5.40.240.32 | 32 | 16 | 40 | 44 | 169 | 240 | 2 | 0,9 | 1 | P 32... - D 32 |
| | Queue cylindrique | F2139.5.10.110.08 | 8 | 4 | 10 | | 25 | 110 | 2 | 0,1 | 1 |
| F2139.5.12.130.10 | | 10 | 5 | 12 | | 30 | 130 | 2 | 0,1 | 1 | P 32... - D 10 |
| F2139.5.12.130.12 | | 12 | 6 | 12 | | 32 | 130 | 2 | 0,1 | 1 | P 32... - D 12 |
| F2139.5.16.140.16 | | 16 | 8 | 16 | | 36 | 140 | 2 | 0,1 | 1 | P 32... - D 16 |
| F2139.5.20.160.20 | | 20 | 10 | 20 | | 45 | 160 | 2 | 0,1 | 1 | P 32... - D 20 |
| F2139.5.25.160.25 | | 25 | 12,5 | 25 | | 45 | 160 | 2 | 0,3 | 1 | P 32... - D 25 |
| F2139.5.32.175.30 | | 30 | 15 | 32 | | 56 | 175 | 2 | 0,7 | 1 | P 32... - D 30 |
| F2139.5.32.175.32 | | 32 | 16 | 32 | | 56 | 175 | 2 | 0,7 | 1 | P 32... - D 32 |
| Queue cylindrique Queue en carbure monobloc | F2139.5.08.070.08-CS | 8 | 4 | 8 | | 25 | 70 | 2 | 0,1 | 1 | P 32... - D 08 |
| | F2139.5.08.100.08-CS | 8 | 4 | 8 | | 55 | 100 | 2 | 0,1 | 1 | |
| | F2139.5.10.080.10-CS | 10 | 5 | 10 | | 30 | 80 | 2 | 0,1 | 1 | P 32... - D 10 |
| | F2139.5.10.120.10-CS | 10 | 5 | 10 | | 70 | 120 | 2 | 0,1 | 1 | |
| | F2139.5.12.090.12-CS | 12 | 6 | 12 | | 32 | 90 | 2 | 0,2 | 1 | P 32... - D 12 |
| | F2139.5.12.145.12-CS | 12 | 6 | 12 | | 87 | 145 | 2 | 0,2 | 1 | |
| | F2139.5.16.110.16-CS | 16 | 8 | 16 | | 43 | 110 | 2 | 0,3 | 1 | P 32... - D 16 |
| | F2139.5.16.195.16-CS | 16 | 8 | 16 | | 128 | 195 | 2 | 0,5 | 1 | |
| | F2139.5.20.130.20-CS | 20 | 10 | 20 | | 47 | 130 | 2 | 0,5 | 1 | P 32... - D 20 |
| | F2139.5.20.240.20-CS | 20 | 10 | 20 | | 157 | 240 | 2 | 0,9 | 1 | |

La désignation des outils comprend le corps ainsi que les pièces de montage sans les plaquettes.

Conseils pour l'utilisation à grande vitesse, voir page F 310.

Clé plate pour têtes vissées, voir page G 105.

F2139...-CS avec queue en carbure monobloc.

Pièces de montage

| D _c mm | 8 | 10 | 12 | 16 | 20 | 25 | 30-32 |
|-------------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Vis de serrage pour plaquette | FS397 (Torx 8) | FS390 (Torx 15) | FS391 (Torx 20) | FS392 (Torx 20) | FS393 (Torx 20) | FS394 (Torx 20) | FS395 (Torx 30) |
| Couple de serrage | 1,0 Nm | 4,0 Nm | 5,0 Nm | 5,0 Nm | 5,0 Nm | 5,0 Nm | 6,0 Nm |

Accessoires

| D _c mm | 8 | 10 | 12-25 | 30-32 |
|-------------------|----------------|-----------------|-----------------|-----------------|
| Tournevis | FS230 (Torx 8) | FS229 (Torx 15) | FS228 (Torx 20) | FS396 (Torx 30) |

Plaquettes amovibles

| Désignation | D _c ^{-0.03} mm | P | | | | | M | | | | K | | | | N | | S | | | | H | | |
|-------------|------------------------------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|------|-------|-------|-------|-------|-------|-------|
| | | HC | | | | | HC | | | | HC | | | | HC | HW | HC | | | | HC | HC | |
| | | WKP25 | WKP35 | WKP35S | WSP45 | WSP46 | WSM35 | WSM36 | WSP45 | WSP46 | WAK15 | WKK25 | WKP25 | WKP35 | WKP35S | WXN15 | WK10 | WSM35 | WSM36 | WSP45 | WSP46 | WHH15 | WXM15 |
| P3201-D08 | 8 | ☺ | ☺ | | | | | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3201-D10 | 10 | ☺ | ☺ | | | | | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3201-D12 | 12 | ☺ | ☺ | | | | | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3201-D16 | 16 | ☺ | ☺ | | | | | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3201-D20 | 20 | ☺ | ☺ | | | | | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3201-D25 | 25 | ☺ | ☺ | | | | | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3201-D30 | 30 | ☺ | ☺ | | | | | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3201-D32 | 32 | ☺ | ☺ | | | | | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3204-D08 | 8 | ☺ | | | ☺ | | ☺ | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3204-D10 | 10 | ☺ | | | ☺ | | ☺ | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3204-D12 | 12 | ☺ | | | ☺ | | ☺ | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3204-D16 | 16 | ☺ | | | ☺ | | ☺ | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3204-D20 | 20 | ☺ | | | ☺ | | ☺ | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3204-D25 | 25 | ☺ | | | ☺ | | ☺ | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3204-D30 | 30 | ☺ | | | ☺ | | ☺ | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |
| P3204-D32 | 32 | ☺ | | | ☺ | | ☺ | | ☺ | | | ☺ | ☺ | ☺ | | | | ☺ | ☺ | ☺ | ☺ | ☺ | |

HC = carbure revêtu

HW = carbure non revêtu

WALTER SELECT

La bonne plaquette pour :

☺
bonnes

☹
moyennes

☹
défavorables

conditions d'usinage