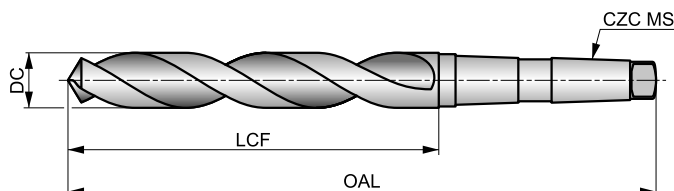


A130



Broca HSS, Haste Cônica, Acabamento Revenido a Vapor

Broca versátil com diâmetros maiores - até 50,8mm e 2". A haste cônica fornece uma melhor aderência na fixação à máquina. A ponta convencional de 118° fornece resistência e facilita o reafinamento. O acabamento revenido a vapor retém o fluido de corte e evita a adesão de cavacos à ferramenta. Adequada para furar diversos materiais.



| | | |
|----------|---------|-------|
| HSS | DIN 345 | 4xD |
| 118° | ST | |
| λ 20-35° | R | DC h8 |

Recomendação do grupo de mat. da peça de trabalho, valores iniciais p/ velocidade de corte (m/min) e Código Alfa do avanço. Tabelas c/ avanço por rotação encontram-se a partir da pág 175.

| | | | | | | | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| P1.1 ■ 33 I | P1.2 ■ 37 I | P1.3 ■ 38 I | P2.1 ■ 28 I | P2.2 ■ 25 F | P2.3 ■ 22 E | P3.1 ■ 18 F | P3.2 ■ 14 F | P3.3 ■ 12 E | P4.1 ■ 11 F | P4.2 ■ 9 E | P4.3 ■ 7 D | M1.1 ■ 21 E | M1.2 ■ 17 E |
| M2.1 ■ 18 E | M2.2 ■ 15 E | M3.1 ■ 10 G | M3.2 ■ 9 G | M3.3 ■ 8 G | M4.1 ■ 10 C | K1.1 ■ 30 I | K1.2 ■ 22 E | K1.3 ■ 17 E | K2.1 ■ 25 E | K2.2 ■ 20 E | K2.3 ■ 16 E | K3.1 ■ 22 E | K3.2 ■ 17 E |
| K3.3 ■ 13 E | K4.1 ■ 20 E | K4.2 ■ 15 E | K4.3 ■ 11 E | K4.4 ■ 10 E | K4.5 ■ 8 E | K5.1 ■ 23 E | K5.2 ■ 17 E | K5.3 ■ 13 E | N1.1 ■ 26 J | N1.2 ■ 20 J | N1.3 ■ 13 I | N2.1 ■ 43 H | N2.2 ■ 39 H |
| N2.3 ■ 28 H | N3.1 ■ 59 H | N3.2 ■ 35 I | N3.3 ■ 18 F | N4.1 ■ 30 K | N4.2 ■ 28 J | N4.3 ■ 14 H | S1.1 ■ 23 F | S1.2 ■ 13 D | S1.3 ■ 7 B | S2.1 ■ 9 E | S2.2 ■ 6 A | S3.1 ■ 7 E | S3.2 ■ 4 A |
| S4.1 ■ 5 E | S4.2 ■ 3 A | | | | | | | | | | | | |

DC> 14 mm com ponta adelgada.

| Produto | DC | DC | DC | LCF | OAL | CZC MS |
|-----------|--------|------|--------|------|-------|--------|
| | (inch) | (mm) | (inch) | | | |
| A1303.0 | — | 3.00 | 0.1181 | 33.0 | 114.0 | MK 1 |
| A1301/8 | 1/8 | 3.18 | 0.1252 | 36.0 | 117.0 | MK 1 |
| A1303.2 | — | 3.20 | 0.1260 | 36.0 | 117.0 | MK 1 |
| A1303.25 | — | 3.25 | 0.1280 | 36.0 | 117.0 | MK 1 |
| A1303.3 | — | 3.30 | 0.1299 | 36.0 | 117.0 | MK 1 |
| A1303.5 | — | 3.50 | 0.1378 | 39.0 | 120.0 | MK 1 |
| A1309/64 | 9/64 | 3.57 | 0.1406 | 39.0 | 120.0 | MK 1 |
| A1303.75 | — | 3.75 | 0.1476 | 39.0 | 120.0 | MK 1 |
| A1305/32 | 5/32 | 3.97 | 0.1563 | 43.0 | 124.0 | MK 1 |
| A1304.0 | — | 4.00 | 0.1575 | 43.0 | 124.0 | MK 1 |
| A1304.1 | — | 4.10 | 0.1614 | 43.0 | 124.0 | MK 1 |
| A1304.2 | — | 4.20 | 0.1654 | 43.0 | 124.0 | MK 1 |
| A1304.25 | — | 4.25 | 0.1673 | 43.0 | 124.0 | MK 1 |
| A13011/64 | 11/64 | 4.37 | 0.1719 | 47.0 | 128.0 | MK 1 |
| A1304.5 | — | 4.50 | 0.1772 | 47.0 | 128.0 | MK 1 |
| A1304.75 | — | 4.75 | 0.1870 | 52.0 | 128.0 | MK 1 |
| A1303/16 | 3/16 | 4.76 | 0.1875 | 52.0 | 133.0 | MK 1 |
| A1304.8 | — | 4.80 | 0.1890 | 52.0 | 133.0 | MK 1 |
| A1304.9 | — | 4.90 | 0.1929 | 52.0 | 133.0 | MK 1 |
| A1305.0 | — | 5.00 | 0.1969 | 52.0 | 133.0 | MK 1 |
| A1305.1 | — | 5.10 | 0.2008 | 52.0 | 133.0 | MK 1 |
| A13013/64 | 13/64 | 5.16 | 0.2031 | 52.0 | 133.0 | MK 1 |
| A1305.2 | — | 5.20 | 0.2047 | 52.0 | 133.0 | MK 1 |

| Produto | DC | DC | DC | LCF | OAL | CZC MS |
|-----------|--------|------|--------|------|-------|--------|
| | (inch) | (mm) | (inch) | (mm) | (mm) | |
| A1305.25 | – | 5.25 | 0.2067 | 52.0 | 133.0 | MK 1 |
| A1305.4 | – | 5.40 | 0.2126 | 57.0 | 138.0 | MK 1 |
| A1305.5 | – | 5.50 | 0.2165 | 57.0 | 138.0 | MK 1 |
| A1307/32 | 7/32 | 5.56 | 0.2188 | 57.0 | 138.0 | MK 1 |
| A1305.7 | – | 5.70 | 0.2244 | 57.0 | 138.0 | MK 1 |
| A1305.75 | – | 5.75 | 0.2264 | 57.0 | 138.0 | MK 1 |
| A1305.8 | – | 5.80 | 0.2283 | 57.0 | 138.0 | MK 1 |
| A1305.9 | – | 5.90 | 0.2323 | 57.0 | 138.0 | MK 1 |
| A13015/64 | 15/64 | 5.95 | 0.2344 | 57.0 | 138.0 | MK 1 |
| A1306.0 | – | 6.00 | 0.2362 | 57.0 | 138.0 | MK 1 |
| A1306.1 | – | 6.10 | 0.2402 | 63.0 | 144.0 | MK 1 |
| A1306.2 | – | 6.20 | 0.2441 | 63.0 | 144.0 | MK 1 |
| A1306.25 | – | 6.25 | 0.2461 | 63.0 | 144.0 | MK 1 |
| A1306.3 | – | 6.30 | 0.2480 | 63.0 | 144.0 | MK 1 |
| A1301/4 | 1/4 | 6.35 | 0.2500 | 63.0 | 144.0 | MK 1 |
| A1306.4 | – | 6.40 | 0.2520 | 63.0 | 144.0 | MK 1 |
| A1306.5 | – | 6.50 | 0.2559 | 63.0 | 144.0 | MK 1 |
| A1306.6 | – | 6.60 | 0.2598 | 63.0 | 144.0 | MK 1 |
| A1306.7 | – | 6.70 | 0.2638 | 63.0 | 144.0 | MK 1 |
| A13017/64 | 17/64 | 6.75 | 0.2656 | 69.0 | 150.0 | MK 1 |
| A1306.75 | – | 6.75 | 0.2657 | 69.0 | 150.0 | MK 1 |
| A1306.8 | – | 6.80 | 0.2677 | 69.0 | 150.0 | MK 1 |
| A1306.9 | – | 6.90 | 0.2717 | 69.0 | 150.0 | MK 1 |
| A1307.0 | – | 7.00 | 0.2756 | 69.0 | 150.0 | MK 1 |
| A1309/32 | 9/32 | 7.14 | 0.2813 | 69.0 | 150.0 | MK 1 |
| A1307.2 | – | 7.20 | 0.2835 | 69.0 | 150.0 | MK 1 |
| A1307.25 | – | 7.25 | 0.2854 | 69.0 | 150.0 | MK 1 |
| A1307.3 | – | 7.30 | 0.2874 | 69.0 | 150.0 | MK 1 |
| A1307.4 | – | 7.40 | 0.2913 | 69.0 | 150.0 | MK 1 |
| A1307.5 | – | 7.50 | 0.2953 | 69.0 | 150.0 | MK 1 |
| A13019/64 | 19/64 | 7.54 | 0.2969 | 75.0 | 156.0 | MK 1 |
| A1307.7 | – | 7.70 | 0.3031 | 75.0 | 156.0 | MK 1 |
| A1307.75 | – | 7.75 | 0.3051 | 75.0 | 156.0 | MK 1 |
| A1307.8 | – | 7.80 | 0.3071 | 75.0 | 156.0 | MK 1 |
| A1307.9 | – | 7.90 | 0.3110 | 75.0 | 156.0 | MK 1 |
| A1305/16 | 5/16 | 7.94 | 0.3125 | 75.0 | 156.0 | MK 1 |
| A1308.0 | – | 8.00 | 0.3150 | 75.0 | 156.0 | MK 1 |
| A1308.1 | – | 8.10 | 0.3189 | 75.0 | 156.0 | MK 1 |
| A1308.2 | – | 8.20 | 0.3228 | 75.0 | 156.0 | MK 1 |
| A1308.25 | – | 8.25 | 0.3248 | 75.0 | 156.0 | MK 1 |
| A1308.3 | – | 8.30 | 0.3268 | 75.0 | 156.0 | MK 1 |
| A13021/64 | 21/64 | 8.33 | 0.3281 | 75.0 | 156.0 | MK 1 |
| A1308.4 | – | 8.40 | 0.3307 | 75.0 | 156.0 | MK 1 |
| A1308.5 | – | 8.50 | 0.3346 | 75.0 | 156.0 | MK 1 |
| A1308.6 | – | 8.60 | 0.3386 | 81.0 | 162.0 | MK 1 |
| A1308.7 | – | 8.70 | 0.3425 | 81.0 | 162.0 | MK 1 |
| A13011/32 | 11/32 | 8.73 | 0.3438 | 81.0 | 162.0 | MK 1 |
| A1308.75 | – | 8.75 | 0.3445 | 81.0 | 162.0 | MK 1 |
| A1308.8 | – | 8.80 | 0.3465 | 81.0 | 162.0 | MK 1 |
| A1308.9 | – | 8.90 | 0.3504 | 81.0 | 162.0 | MK 1 |
| A1309.0 | – | 9.00 | 0.3543 | 81.0 | 162.0 | MK 1 |
| A1309.1 | – | 9.10 | 0.3583 | 81.0 | 162.0 | MK 1 |
| A13023/64 | 23/64 | 9.13 | 0.3594 | 81.0 | 162.0 | MK 1 |
| A1309.2 | – | 9.20 | 0.3622 | 81.0 | 162.0 | MK 1 |
| A1309.25 | – | 9.25 | 0.3642 | 81.0 | 162.0 | MK 1 |
| A1309.3 | – | 9.30 | 0.3661 | 81.0 | 162.0 | MK 1 |
| A1309.5 | – | 9.50 | 0.3740 | 81.0 | 162.0 | MK 1 |
| A1303/8 | 3/8 | 9.52 | 0.3750 | 87.0 | 168.0 | MK 1 |
| A1309.6 | – | 9.60 | 0.3780 | 87.0 | 168.0 | MK 1 |
| A1309.7 | – | 9.70 | 0.3819 | 87.0 | 168.0 | MK 1 |
| A1309.75 | – | 9.75 | 0.3839 | 87.0 | 168.0 | MK 1 |
| A1309.8 | – | 9.80 | 0.3858 | 87.0 | 168.0 | MK 1 |

| Produto | DC | DC | DC | LCF | OAL | CZC MS |
|-----------|--------|-------|--------|-------|-------|--------|
| | (inch) | (mm) | (inch) | (mm) | (mm) | |
| A1309.9 | – | 9.90 | 0.3898 | 87.0 | 168.0 | MK 1 |
| A13025/64 | 25/64 | 9.92 | 0.3906 | 87.0 | 168.0 | MK 1 |
| A13010.0 | – | 10.00 | 0.3937 | 87.0 | 168.0 | MK 1 |
| A13010.1 | – | 10.10 | 0.3976 | 87.0 | 168.0 | MK 1 |
| A13010.2 | – | 10.20 | 0.4016 | 87.0 | 168.0 | MK 1 |
| A13010.25 | – | 10.25 | 0.4035 | 87.0 | 168.0 | MK 1 |
| A13010.3 | – | 10.30 | 0.4055 | 87.0 | 168.0 | MK 1 |
| A13013/32 | 13/32 | 10.32 | 0.4063 | 87.0 | 168.0 | MK 1 |
| A13010.5 | – | 10.50 | 0.4134 | 87.0 | 168.0 | MK 1 |
| A13027/64 | 27/64 | 10.72 | 0.4219 | 94.0 | 175.0 | MK 1 |
| A13010.75 | – | 10.75 | 0.4232 | 94.0 | 175.0 | MK 1 |
| A13010.8 | – | 10.80 | 0.4252 | 94.0 | 175.0 | MK 1 |
| A13010.9 | – | 10.90 | 0.4291 | 94.0 | 175.0 | MK 1 |
| A13011.0 | – | 11.00 | 0.4331 | 94.0 | 175.0 | MK 1 |
| A13011.1 | – | 11.10 | 0.4370 | 94.0 | 175.0 | MK 1 |
| A1307/16 | 7/16 | 11.11 | 0.4375 | 94.0 | 175.0 | MK 1 |
| A13011.2 | – | 11.20 | 0.4409 | 94.0 | 175.0 | MK 1 |
| A13011.25 | – | 11.25 | 0.4429 | 94.0 | 175.0 | MK 1 |
| A13011.3 | – | 11.30 | 0.4449 | 94.0 | 175.0 | MK 1 |
| A13011.4 | – | 11.40 | 0.4488 | 94.0 | 175.0 | MK 1 |
| A13011.5 | – | 11.50 | 0.4528 | 94.0 | 175.0 | MK 1 |
| A13029/64 | 29/64 | 11.51 | 0.4531 | 94.0 | 175.0 | MK 1 |
| A13011.6 | – | 11.60 | 0.4567 | 94.0 | 175.0 | MK 1 |
| A13011.7 | – | 11.70 | 0.4606 | 94.0 | 175.0 | MK 1 |
| A13011.75 | – | 11.75 | 0.4626 | 94.0 | 175.0 | MK 1 |
| A13011.8 | – | 11.80 | 0.4646 | 94.0 | 175.0 | MK 1 |
| A13011.9 | – | 11.90 | 0.4685 | 101.0 | 182.0 | MK 1 |
| A13015/32 | 15/32 | 11.91 | 0.4688 | 101.0 | 182.0 | MK 1 |
| A13012.0 | – | 12.00 | 0.4724 | 101.0 | 182.0 | MK 1 |
| A13012.1 | – | 12.10 | 0.4764 | 101.0 | 182.0 | MK 1 |
| A13012.2 | – | 12.20 | 0.4803 | 101.0 | 182.0 | MK 1 |
| A13012.25 | – | 12.25 | 0.4823 | 101.0 | 182.0 | MK 1 |
| A13031/64 | 31/64 | 12.30 | 0.4844 | 101.0 | 182.0 | MK 1 |
| A13012.3 | – | 12.30 | 0.4843 | 101.0 | 182.0 | MK 1 |
| A13012.4 | – | 12.40 | 0.4882 | 101.0 | 182.0 | MK 1 |
| A13012.5 | – | 12.50 | 0.4921 | 101.0 | 182.0 | MK 1 |
| A13012.6 | – | 12.60 | 0.4961 | 101.0 | 182.0 | MK 1 |
| A13012.7 | – | 12.70 | 0.5000 | 101.0 | 182.0 | MK 1 |
| A1301/2 | 1/2 | 12.70 | 0.5000 | 101.0 | 182.0 | MK 1 |
| A13012.75 | – | 12.75 | 0.5020 | 101.0 | 182.0 | MK 1 |
| A13012.8 | – | 12.80 | 0.5039 | 101.0 | 182.0 | MK 1 |
| A13012.9 | – | 12.90 | 0.5079 | 101.0 | 182.0 | MK 1 |
| A13013.0 | – | 13.00 | 0.5118 | 101.0 | 182.0 | MK 1 |
| A13033/64 | 33/64 | 13.10 | 0.5156 | 101.0 | 182.0 | MK 1 |
| A13013.2 | – | 13.20 | 0.5197 | 101.0 | 182.0 | MK 1 |
| A13013.25 | – | 13.25 | 0.5217 | 108.0 | 189.0 | MK 1 |
| A13017/32 | 17/32 | 13.49 | 0.5313 | 108.0 | 189.0 | MK 1 |
| A13013.5 | – | 13.50 | 0.5315 | 108.0 | 189.0 | MK 1 |
| A13013.6 | – | 13.60 | 0.5354 | 108.0 | 189.0 | MK 1 |
| A13013.7 | – | 13.70 | 0.5394 | 108.0 | 189.0 | MK 1 |
| A13013.75 | – | 13.75 | 0.5413 | 108.0 | 189.0 | MK 1 |
| A13013.8 | – | 13.80 | 0.5433 | 108.0 | 189.0 | MK 1 |
| A13035/64 | 35/64 | 13.89 | 0.5469 | 108.0 | 189.0 | MK 1 |
| A13013.9 | – | 13.90 | 0.5472 | 108.0 | 189.0 | MK 1 |
| A13014.0 | – | 14.00 | 0.5512 | 108.0 | 189.0 | MK 1 |
| A13014.1 | – | 14.10 | 0.5551 | 114.0 | 212.0 | MK 2 |
| A13014.2 | – | 14.20 | 0.5591 | 114.0 | 212.0 | MK 2 |
| A13014.25 | – | 14.25 | 0.5610 | 114.0 | 212.0 | MK 2 |
| A1309/16 | 9/16 | 14.29 | 0.5625 | 114.0 | 212.0 | MK 2 |
| A13014.3 | – | 14.30 | 0.5630 | 114.0 | 212.0 | MK 2 |
| A13014.4 | – | 14.40 | 0.5669 | 114.0 | 212.0 | MK 2 |
| A13014.5 | – | 14.50 | 0.5709 | 114.0 | 212.0 | MK 2 |

| Produto | DC | DC | DC | LCF | OAL | CZC MS |
|-----------|--------|-------|--------|-------|-------|--------|
| | (inch) | (mm) | (inch) | (mm) | (mm) | |
| A13014.6 | – | 14.60 | 0.5748 | 114.0 | 212.0 | MK 2 |
| A13037/64 | 37/64 | 14.68 | 0.5781 | 114.0 | 212.0 | MK 2 |
| A13014.7 | – | 14.70 | 0.5787 | 114.0 | 212.0 | MK 2 |
| A13014.75 | – | 14.75 | 0.5807 | 114.0 | 212.0 | MK 2 |
| A13014.8 | – | 14.80 | 0.5827 | 114.0 | 212.0 | MK 2 |
| A13014.9 | – | 14.90 | 0.5866 | 114.0 | 212.0 | MK 2 |
| A13015.0 | – | 15.00 | 0.5906 | 114.0 | 212.0 | MK 2 |
| A13019/32 | 19/32 | 15.08 | 0.5938 | 120.0 | 218.0 | MK 2 |
| A13015.1 | – | 15.10 | 0.5945 | 120.0 | 218.0 | MK 2 |
| A13015.2 | – | 15.20 | 0.5984 | 120.0 | 218.0 | MK 2 |
| A13015.25 | – | 15.25 | 0.6004 | 120.0 | 218.0 | MK 2 |
| A13039/64 | 39/64 | 15.48 | 0.6094 | 120.0 | 218.0 | MK 2 |
| A13015.5 | – | 15.50 | 0.6102 | 120.0 | 218.0 | MK 2 |
| A13015.7 | – | 15.70 | 0.6181 | 120.0 | 218.0 | MK 2 |
| A13015.75 | – | 15.75 | 0.6201 | 120.0 | 218.0 | MK 2 |
| A13015.8 | – | 15.80 | 0.6220 | 120.0 | 218.0 | MK 2 |
| A1305/8 | 5/8 | 15.88 | 0.6250 | 120.0 | 218.0 | MK 2 |
| A13015.9 | – | 15.90 | 0.6260 | 120.0 | 218.0 | MK 2 |
| A13016.0 | – | 16.00 | 0.6299 | 120.0 | 218.0 | MK 2 |
| A13016.1 | – | 16.10 | 0.6339 | 125.0 | 223.0 | MK 2 |
| A13016.2 | – | 16.20 | 0.6378 | 125.0 | 223.0 | MK 2 |
| A13016.25 | – | 16.25 | 0.6398 | 125.0 | 223.0 | MK 2 |
| A13041/64 | 41/64 | 16.27 | 0.6406 | 125.0 | 223.0 | MK 2 |
| A13016.5 | – | 16.50 | 0.6496 | 125.0 | 223.0 | MK 2 |
| A13021/32 | 21/32 | 16.67 | 0.6563 | 125.0 | 223.0 | MK 2 |
| A13016.75 | – | 16.75 | 0.6594 | 125.0 | 223.0 | MK 2 |
| A13017.0 | – | 17.00 | 0.6693 | 125.0 | 223.0 | MK 2 |
| A13043/64 | 43/64 | 17.07 | 0.6719 | 130.0 | 228.0 | MK 2 |
| A13017.25 | – | 17.25 | 0.6791 | 130.0 | 228.0 | MK 2 |
| A13011/16 | 11/16 | 17.46 | 0.6875 | 130.0 | 228.0 | MK 2 |
| A13017.5 | – | 17.50 | 0.6890 | 130.0 | 228.0 | MK 2 |
| A13017.75 | – | 17.75 | 0.6988 | 130.0 | 228.0 | MK 2 |
| A13045/64 | 45/64 | 17.86 | 0.7031 | 130.0 | 228.0 | MK 2 |
| A13018.0 | – | 18.00 | 0.7087 | 130.0 | 228.0 | MK 2 |
| A13018.25 | – | 18.25 | 0.7185 | 135.0 | 233.0 | MK 2 |
| A13023/32 | 23/32 | 18.26 | 0.7188 | 135.0 | 233.0 | MK 2 |
| A13018.5 | – | 18.50 | 0.7283 | 135.0 | 233.0 | MK 2 |
| A13047/64 | 47/64 | 18.65 | 0.7344 | 135.0 | 233.0 | MK 2 |
| A13018.75 | – | 18.75 | 0.7382 | 135.0 | 233.0 | MK 2 |
| A13019.0 | – | 19.00 | 0.7480 | 135.0 | 233.0 | MK 2 |
| A1303/4 | 3/4 | 19.05 | 0.7500 | 140.0 | 238.0 | MK 2 |
| A13019.25 | – | 19.25 | 0.7579 | 140.0 | 238.0 | MK 2 |
| A13049/64 | 49/64 | 19.45 | 0.7656 | 140.0 | 238.0 | MK 2 |
| A13019.5 | – | 19.50 | 0.7677 | 140.0 | 238.0 | MK 2 |
| A13019.75 | – | 19.75 | 0.7776 | 140.0 | 238.0 | MK 2 |
| A13025/32 | 25/32 | 19.84 | 0.7813 | 140.0 | 238.0 | MK 2 |
| A13020.0 | – | 20.00 | 0.7874 | 140.0 | 238.0 | MK 2 |
| A13051/64 | 51/64 | 20.24 | 0.7969 | 145.0 | 243.0 | MK 2 |
| A13020.25 | – | 20.25 | 0.7972 | 145.0 | 243.0 | MK 2 |
| A13020.4 | – | 20.40 | 0.8031 | 145.0 | 243.0 | MK 2 |
| A13020.5 | – | 20.50 | 0.8071 | 145.0 | 243.0 | MK 2 |
| A13013/16 | 13/16 | 20.64 | 0.8125 | 145.0 | 243.0 | MK 2 |
| A13020.75 | – | 20.75 | 0.8169 | 145.0 | 243.0 | MK 2 |
| A13021.0 | – | 21.00 | 0.8268 | 145.0 | 243.0 | MK 2 |
| A13053/64 | 53/64 | 21.03 | 0.8281 | 145.0 | 243.0 | MK 2 |
| A13021.25 | – | 21.25 | 0.8366 | 150.0 | 248.0 | MK 2 |
| A13027/32 | 27/32 | 21.43 | 0.8437 | 150.0 | 248.0 | MK 2 |
| A13021.5 | – | 21.50 | 0.8465 | 150.0 | 248.0 | MK 2 |
| A13021.75 | – | 21.75 | 0.8563 | 150.0 | 248.0 | MK 2 |
| A13055/64 | 55/64 | 21.83 | 0.8594 | 150.0 | 248.0 | MK 2 |
| A13022.0 | – | 22.00 | 0.8661 | 150.0 | 248.0 | MK 2 |
| A1307/8 | 7/8 | 22.22 | 0.8750 | 150.0 | 248.0 | MK 2 |

| Produto | DC | DC | DC | LCF | OAL | CZC MS |
|-------------|---------|-------|--------|-------|-------|--------|
| | (inch) | (mm) | (inch) | (mm) | (mm) | |
| A13022.25 | – | 22.25 | 0.8760 | 150.0 | 248.0 | MK 2 |
| A13022.5 | – | 22.50 | 0.8858 | 155.0 | 253.0 | MK 2 |
| A13057/64 | 57/64 | 22.62 | 0.8906 | 155.0 | 253.0 | MK 2 |
| A13022.75 | – | 22.75 | 0.8957 | 155.0 | 253.0 | MK 2 |
| A13023.0 | – | 23.00 | 0.9055 | 155.0 | 253.0 | MK 2 |
| A13029/32 | 29/32 | 23.02 | 0.9063 | 155.0 | 253.0 | MK 2 |
| A13023.25 | – | 23.25 | 0.9154 | 155.0 | 276.0 | MK 3 |
| A13059/64 | 59/64 | 23.42 | 0.9219 | 155.0 | 276.0 | MK 3 |
| A13023.5 | – | 23.50 | 0.9252 | 155.0 | 276.0 | MK 3 |
| A13023.75 | – | 23.75 | 0.9350 | 160.0 | 281.0 | MK 3 |
| A13015/16 | 15/16 | 23.81 | 0.9375 | 160.0 | 281.0 | MK 3 |
| A13024.0 | – | 24.00 | 0.9449 | 160.0 | 281.0 | MK 3 |
| A13061/64 | 61/64 | 24.21 | 0.9531 | 160.0 | 281.0 | MK 3 |
| A13024.25 | – | 24.25 | 0.9547 | 160.0 | 281.0 | MK 3 |
| A13024.5 | – | 24.50 | 0.9646 | 160.0 | 281.0 | MK 3 |
| A13031/32 | 31/32 | 24.61 | 0.9688 | 160.0 | 281.0 | MK 3 |
| A13024.75 | – | 24.75 | 0.9744 | 160.0 | 281.0 | MK 3 |
| A13025.0 | – | 25.00 | 0.9843 | 160.0 | 281.0 | MK 3 |
| A13063/64 | 63/64 | 25.00 | 0.9844 | 160.0 | 286.0 | MK 3 |
| A13025.25 | – | 25.25 | 0.9941 | 165.0 | 286.0 | MK 3 |
| A1301 | 1" | 25.40 | 1.0000 | 165.0 | 286.0 | MK 3 |
| A13025.5 | – | 25.50 | 1.0039 | 165.0 | 286.0 | MK 3 |
| A13025.75 | – | 25.75 | 1.0138 | 165.0 | 286.0 | MK 3 |
| A13026.0 | – | 26.00 | 1.0236 | 165.0 | 286.0 | MK 3 |
| A13026.25 | – | 26.25 | 1.0335 | 165.0 | 286.0 | MK 3 |
| A13026.5 | – | 26.50 | 1.0433 | 165.0 | 286.0 | MK 3 |
| A13026.75 | – | 26.75 | 1.0531 | 170.0 | 291.0 | MK 3 |
| A1301.1/16 | 1.1/16 | 26.99 | 1.0625 | 170.0 | 291.0 | MK 3 |
| A13027.0 | – | 27.00 | 1.0630 | 170.0 | 291.0 | MK 3 |
| A13027.25 | – | 27.25 | 1.0728 | 170.0 | 291.0 | MK 3 |
| A13027.5 | – | 27.50 | 1.0827 | 170.0 | 291.0 | MK 3 |
| A13027.75 | – | 27.75 | 1.0925 | 170.0 | 291.0 | MK 3 |
| A13028.0 | – | 28.00 | 1.1024 | 170.0 | 291.0 | MK 3 |
| A13028.25 | – | 28.25 | 1.1122 | 175.0 | 296.0 | MK 3 |
| A13028.5 | – | 28.50 | 1.1220 | 175.0 | 296.0 | MK 3 |
| A1301.1/8 | 1.1/8 | 28.58 | 1.1250 | 175.0 | 296.0 | MK 3 |
| A13028.75 | – | 28.75 | 1.1319 | 175.0 | 296.0 | MK 3 |
| A13029.0 | – | 29.00 | 1.1417 | 175.0 | 296.0 | MK 3 |
| A13029.25 | – | 29.25 | 1.1516 | 175.0 | 296.0 | MK 3 |
| A1301.5/32 | 1.5/32 | 29.37 | 1.1563 | 175.0 | 296.0 | MK 3 |
| A13029.5 | – | 29.50 | 1.1614 | 175.0 | 296.0 | MK 3 |
| A13029.75 | – | 29.75 | 1.1713 | 175.0 | 296.0 | MK 3 |
| A13030.0 | – | 30.00 | 1.1811 | 175.0 | 296.0 | MK 3 |
| A1301.3/16 | 1.3/16 | 30.16 | 1.1875 | 180.0 | 301.0 | MK 3 |
| A13030.25 | – | 30.25 | 1.1909 | 180.0 | 301.0 | MK 3 |
| A13030.5 | – | 30.50 | 1.2008 | 180.0 | 301.0 | MK 3 |
| A13030.75 | – | 30.75 | 1.2106 | 180.0 | 301.0 | MK 3 |
| A1301.7/32 | 1.7/32 | 30.96 | 1.2188 | 180.0 | 301.0 | MK 3 |
| A13031.0 | – | 31.00 | 1.2205 | 180.0 | 301.0 | MK 3 |
| A13031.25 | – | 31.25 | 1.2303 | 180.0 | 301.0 | MK 3 |
| A13031.5 | – | 31.50 | 1.2402 | 180.0 | 301.0 | MK 3 |
| A13031.75 | – | 31.75 | 1.2500 | 185.0 | 306.0 | MK 3 |
| A1301.1/4 | 1.1/4 | 31.75 | 1.2500 | 185.0 | 306.0 | MK 3 |
| A13032.0 | – | 32.00 | 1.2598 | 185.0 | 334.0 | MK 4 |
| A13032.5 | – | 32.50 | 1.2795 | 185.0 | 334.0 | MK 4 |
| A1301.9/32 | 1.9/32 | 32.54 | 1.2813 | 185.0 | 334.0 | MK 4 |
| A13033.0 | – | 33.00 | 1.2992 | 185.0 | 334.0 | MK 4 |
| A1301.5/16 | 1.5/16 | 33.34 | 1.3125 | 185.0 | 334.0 | MK 4 |
| A13033.5 | – | 33.50 | 1.3189 | 185.0 | 334.0 | MK 4 |
| A13034.0 | – | 34.00 | 1.3386 | 190.0 | 339.0 | MK 4 |
| A1301.11/32 | 1.11/32 | 34.13 | 1.3438 | 190.0 | 339.0 | MK 4 |
| A13034.5 | – | 34.50 | 1.3583 | 190.0 | 339.0 | MK 4 |

| Producto | DC | DC | DC | LCF | OAL | CZC MS |
|-------------|---------|-------|--------|-------|-------|--------|
| | (inch) | (mm) | (inch) | (mm) | (mm) | |
| A1301.3/8 | 1.3/8 | 34.93 | 1.3750 | 190.0 | 339.0 | MK 4 |
| A13035.0 | – | 35.00 | 1.3780 | 190.0 | 339.0 | MK 4 |
| A13035.5 | – | 35.50 | 1.3976 | 190.0 | 339.0 | MK 4 |
| A1301.13/32 | 1.13/32 | 35.72 | 1.4063 | 195.0 | 344.0 | MK 4 |
| A13036.0 | – | 36.00 | 1.4173 | 195.0 | 344.0 | MK 4 |
| A13036.5 | – | 36.50 | 1.4370 | 195.0 | 344.0 | MK 4 |
| A1301.7/16 | 1.7/16 | 36.51 | 1.4375 | 195.0 | 344.0 | MK 4 |
| A13037.0 | – | 37.00 | 1.4567 | 195.0 | 344.0 | MK 4 |
| A13037.5 | – | 37.50 | 1.4764 | 195.0 | 344.0 | MK 4 |
| A13038.0 | – | 38.00 | 1.4961 | 200.0 | 349.0 | MK 4 |
| A1301.1/2 | 1.1/2 | 38.10 | 1.5000 | 200.0 | 349.0 | MK 4 |
| A13038.5 | – | 38.50 | 1.5157 | 200.0 | 349.0 | MK 4 |
| A13039.0 | – | 39.00 | 1.5354 | 200.0 | 349.0 | MK 4 |
| A13039.5 | – | 39.50 | 1.5551 | 200.0 | 349.0 | MK 4 |
| A1301.9/16 | 1.9/16 | 39.69 | 1.5625 | 200.0 | 349.0 | MK 4 |
| A13040.0 | – | 40.00 | 1.5748 | 200.0 | 349.0 | MK 4 |
| A13040.5 | – | 40.50 | 1.5945 | 205.0 | 354.0 | MK 4 |
| A13041.0 | – | 41.00 | 1.6142 | 205.0 | 354.0 | MK 4 |
| A1301.5/8 | 1.5/8 | 41.28 | 1.6250 | 205.0 | 354.0 | MK 4 |
| A13041.5 | – | 41.50 | 1.6339 | 205.0 | 354.0 | MK 4 |
| A13042.0 | – | 42.00 | 1.6535 | 205.0 | 354.0 | MK 4 |
| A13042.5 | – | 42.50 | 1.6732 | 205.0 | 354.0 | MK 4 |
| A1301.11/16 | 1.11/16 | 42.86 | 1.6875 | 210.0 | 359.0 | MK 4 |
| A13043.0 | – | 43.00 | 1.6929 | 210.0 | 359.0 | MK 4 |
| A13043.5 | – | 43.50 | 1.7126 | 210.0 | 359.0 | MK 4 |
| A13044.0 | – | 44.00 | 1.7323 | 210.0 | 359.0 | MK 4 |
| A1301.3/4 | 1.3/4 | 44.45 | 1.7500 | 210.0 | 359.0 | MK 4 |
| A13044.5 | – | 44.50 | 1.7520 | 210.0 | 359.0 | MK 4 |
| A13045.0 | – | 45.00 | 1.7717 | 210.0 | 359.0 | MK 4 |
| A13045.5 | – | 45.50 | 1.7913 | 215.0 | 364.0 | MK 4 |
| A13046.0 | – | 46.00 | 1.8110 | 215.0 | 364.0 | MK 4 |
| A13046.5 | – | 46.50 | 1.8307 | 215.0 | 364.0 | MK 4 |
| A13047.0 | – | 47.00 | 1.8504 | 215.0 | 364.0 | MK 4 |
| A13047.5 | – | 47.50 | 1.8701 | 215.0 | 364.0 | MK 4 |
| A13048.0 | – | 48.00 | 1.8898 | 220.0 | 369.0 | MK 4 |
| A13048.5 | – | 48.50 | 1.9094 | 220.0 | 369.0 | MK 4 |
| A13049.0 | – | 49.00 | 1.9291 | 220.0 | 369.0 | MK 4 |
| A13049.5 | – | 49.50 | 1.9488 | 220.0 | 369.0 | MK 4 |
| A13050.0 | – | 50.00 | 1.9685 | 220.0 | 369.0 | MK 4 |
| A1302 | 2" | 50.80 | 2.0000 | 225.0 | 374.0 | MK 4 |