



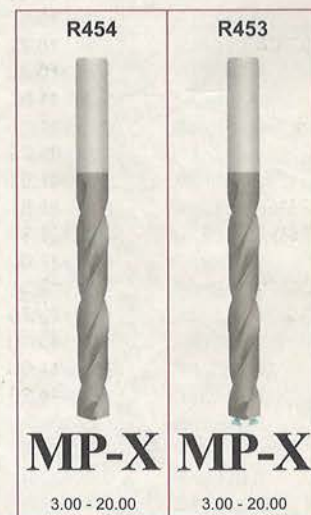
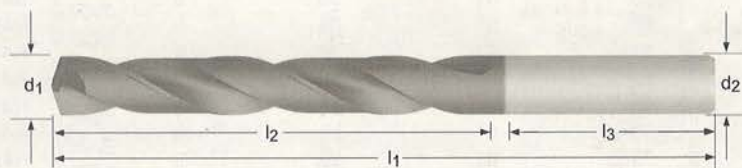
R454

- MP-X Long Drill 5XD
- Broca larga - MP-X 5XD
- Broca MP-X Longa 5XD
- Foret série longue MP-X 5XD

R453

- MP-X Long Drill Oil Feed 5XD
- Broca larga - MP-X - Refrigeración interna 5XD
- Broca MP-X Longa Lub. 5XD
- Foret série longue MP-X - à trous d'huile 5XD

| | | | | | | | | | | | | | | | | | | | | | |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| R454 | ▪ | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 2.1 | 2.2 | 2.3 | 3.1 | 3.2 | 3.3 | 3.4 | 6.1 | 6.2 | 6.3 | 7.1 | 7.2 |
| | | 7.3 | 7.4 | | | | | | | | | | | | | | | | | | |
| | • | 2.4 | 4.1 | 4.2 | 4.3 | 6.4 | | | | | | | | | | | | | | | |
| R453 | ▪ | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 2.1 | 2.2 | 3.1 | 3.2 | 3.3 | 3.4 | 4.1 | 4.2 | 4.3 | 6.1 | 6.2 | 6.3 |
| | | 6.4 | 7.1 | 7.2 | 7.3 | 7.4 | | | | | | | | | | | | | | | |
| | • | 2.3 | 2.4 | | | | | | | | | | | | | | | | | | |



| d_1 Ø Inch | d_1 Ø _m mm | d_1 decimal Inch | l_2 mm | l_1 mm | l_3 mm | d_2 Ø _h mm | R454 | R453 |
|--------------------|-------------------------------|--------------------------|-------------|-------------|-------------|-------------------------------|----------|----------|
| | 3.00 | 0.1181 | 28 | 66 | 36 | 6 | R4543.0 | R4533.0 |
| | 3.10 | 0.1220 | 28 | 66 | 36 | 6 | R4543.1 | R4533.1 |
| 1/8 | 3.18 | 0.1252 | 28 | 66 | 36 | 6 | R4541/8 | R4531/8 |
| | 3.20 | 0.1260 | 28 | 66 | 36 | 6 | R4543.2 | R4533.2 |
| | 3.30 | 0.1299 | 28 | 66 | 36 | 6 | R4543.3 | R4533.3 |
| | 3.40 | 0.1339 | 28 | 66 | 36 | 6 | R4543.4 | R4533.4 |
| | 3.50 | 0.1378 | 28 | 66 | 36 | 6 | R4543.5 | R4533.5 |
| 9/64 | 3.57 | 0.1406 | 28 | 66 | 36 | 6 | R4549/64 | R4539/64 |
| | 3.60 | 0.1417 | 28 | 66 | 36 | 6 | R4543.6 | R4533.6 |
| | 3.70 | 0.1457 | 28 | 66 | 36 | 6 | R4543.7 | R4533.7 |
| | 3.80 | 0.1496 | 36 | 74 | 36 | 6 | R4543.8 | R4533.8 |
| | 3.90 | 0.1535 | 36 | 74 | 36 | 6 | R4543.9 | R4533.9 |
| 5/32 | 3.97 | 0.1563 | 36 | 74 | 36 | 6 | R4545/32 | R4535/32 |
| | 4.00 | 0.1575 | 36 | 74 | 36 | 6 | R4544.0 | R4534.0 |
| | 4.05 | 0.1594 | 36 | 74 | 36 | 6 | | R4534.05 |
| | 4.10 | 0.1614 | 36 | 74 | 36 | 6 | R4544.1 | R4534.1 |
| | 4.20 | 0.1654 | 36 | 74 | 36 | 6 | R4544.2 | R4534.2 |
| | 4.30 | 0.1693 | 36 | 74 | 36 | 6 | R4544.3 | R4534.3 |

R454

DORMER

| d_1 \emptyset Inch | d_1 $\emptyset m_1$ mm | d_1 decimal Inch | l_2 mm | l_1 mm | l_3 mm | d_2 $\emptyset h_6$ mm | R454 | R453 |
|------------------------------|--------------------------------|--------------------------|-------------|-------------|-------------|--------------------------------|-----------|-----------|
| 11/64 | 4.37 | 0.1720 | 36 | 74 | 36 | 6 | R45411/64 | R45311/64 |
| | 4.40 | 0.1732 | 36 | 74 | 36 | 6 | R4544.4 | R4534.4 |
| | 4.50 | 0.1772 | 36 | 74 | 36 | 6 | R4544.5 | R4534.5 |
| | 4.60 | 0.1811 | 36 | 74 | 36 | 6 | R4544.6 | R4534.6 |
| | 4.70 | 0.1850 | 36 | 74 | 36 | 6 | R4544.7 | R4534.7 |
| 3/16 | 4.76 | 0.1874 | 44 | 82 | 36 | 6 | R4543/16 | R4533/16 |
| | 4.80 | 0.1890 | 44 | 82 | 36 | 6 | R4544.8 | R4534.8 |
| | 4.90 | 0.1929 | 44 | 82 | 36 | 6 | R4544.9 | R4534.9 |
| | 5.00 | 0.1969 | 44 | 82 | 36 | 6 | R4545.0 | R4535.0 |
| | 5.05 | 0.1988 | 44 | 82 | 36 | 6 | | R4535.05 |
| | 5.10 | 0.2008 | 44 | 82 | 36 | 6 | R4545.1 | R4535.1 |
| 13/64 | 5.16 | 0.2031 | 44 | 82 | 36 | 6 | R45413/64 | R45313/64 |
| | 5.20 | 0.2047 | 44 | 82 | 36 | 6 | R4545.2 | R4535.2 |
| | 5.50 | 0.2165 | 44 | 82 | 36 | 6 | R4545.5 | R4535.5 |
| 7/32 | 5.56 | 0.2189 | 44 | 82 | 36 | 6 | R4547/32 | R4537/32 |
| | 5.60 | 0.2205 | 44 | 82 | 36 | 6 | R4545.6 | R4535.6 |
| | 5.70 | 0.2244 | 44 | 82 | 36 | 6 | R4545.7 | R4535.7 |
| | 5.80 | 0.2283 | 44 | 82 | 36 | 6 | R4545.8 | R4535.8 |
| 15/64 | 5.95 | 0.2343 | 44 | 82 | 36 | 6 | R45415/64 | R45315/64 |
| | 6.00 | 0.2362 | 44 | 82 | 36 | 6 | R4546.0 | R4536.0 |
| | 6.05 | 0.2382 | 53 | 91 | 36 | 8 | | R4536.05 |
| | 6.10 | 0.2402 | 53 | 91 | 36 | 8 | R4546.1 | R4536.1 |
| | 6.20 | 0.2441 | 53 | 91 | 36 | 8 | R4546.2 | R4536.2 |
| | 6.30 | 0.2480 | 53 | 91 | 36 | 8 | R4546.3 | R4536.3 |
| | 6.35 | 0.2500 | 53 | 91 | 36 | 8 | R4541/4 | R4531/4 |
| 1/4 | 6.40 | 0.2520 | 53 | 91 | 36 | 8 | R4546.4 | R4536.4 |
| | 6.50 | 0.2559 | 53 | 91 | 36 | 8 | R4546.5 | R4536.5 |
| | 6.60 | 0.2598 | 53 | 91 | 36 | 8 | R4546.6 | R4536.6 |
| | 6.70 | 0.2638 | 53 | 91 | 36 | 8 | R4546.7 | R4536.7 |
| | 6.75 | 0.2657 | 53 | 91 | 36 | 8 | R45417/64 | R45317/64 |
| | 6.80 | 0.2677 | 53 | 91 | 36 | 8 | R4546.8 | R4536.8 |
| | 6.90 | 0.2717 | 53 | 91 | 36 | 8 | R4546.9 | R4536.9 |
| 9/32 | 7.00 | 0.2756 | 53 | 91 | 36 | 8 | R4547.0 | R4537.0 |
| | 7.10 | 0.2795 | 53 | 91 | 36 | 8 | R4547.1 | R4537.1 |
| | 7.14 | 0.2811 | 53 | 91 | 36 | 8 | R4549/32 | R4539/32 |
| | 7.30 | 0.2874 | 53 | 91 | 36 | 8 | R4547.3 | R4537.3 |
| | 7.40 | 0.2913 | 53 | 91 | 36 | 8 | R4547.4 | R4537.4 |
| 19/64 | 7.50 | 0.2953 | 53 | 91 | 36 | 8 | R4547.5 | R4537.5 |
| | 7.54 | 0.2969 | 53 | 91 | 36 | 8 | R45419/64 | R45319/64 |
| | 7.60 | 0.2992 | 53 | 91 | 36 | 8 | R4547.6 | R4537.6 |
| | 7.70 | 0.3031 | 53 | 91 | 36 | 8 | R4547.7 | R4537.7 |
| | 7.80 | 0.3071 | 53 | 91 | 36 | 8 | R4547.8 | R4537.8 |
| 5/16 | 7.90 | 0.3110 | 53 | 91 | 36 | 8 | R4547.9 | R4537.9 |
| | 7.94 | 0.3126 | 53 | 91 | 36 | 8 | R4545/16 | R4535/16 |
| | 8.00 | 0.3150 | 53 | 91 | 36 | 8 | R4548.0 | R4538.0 |
| | 8.05 | 0.3169 | 61 | 103 | 40 | 10 | | R4538.05 |
| | 8.10 | 0.3189 | 61 | 103 | 40 | 10 | R4548.1 | R4538.1 |
| | 8.20 | 0.3228 | 61 | 103 | 40 | 10 | R4548.2 | R4538.2 |
| 21/64 | 8.33 | 0.3280 | 61 | 103 | 40 | 10 | R45421/64 | R45321/64 |
| | 8.40 | 0.3307 | 61 | 103 | 40 | 10 | R4548.4 | R4538.4 |
| | 8.50 | 0.3346 | 61 | 103 | 40 | 10 | R4548.5 | R4538.5 |
| | 8.60 | 0.3386 | 61 | 103 | 40 | 10 | R4548.6 | R4538.6 |
| | 8.70 | 0.3425 | 61 | 103 | 40 | 10 | R4548.7 | R4538.7 |
| | 8.73 | 0.3437 | 61 | 103 | 40 | 10 | R45411/32 | R45311/32 |
| 11/32 | 8.80 | 0.3465 | 61 | 103 | 40 | 10 | R4548.8 | R4538.8 |
| | 8.90 | 0.3504 | 61 | 103 | 40 | 10 | R4548.9 | R4538.9 |
| | 9.00 | 0.3543 | 61 | 103 | 40 | 10 | R4549.0 | R4539.0 |
| | 9.10 | 0.3583 | 61 | 103 | 40 | 10 | R4549.1 | R4539.1 |
| | 9.13 | 0.3594 | 61 | 103 | 40 | 10 | R45423/64 | R45323/64 |
| | 9.30 | 0.3661 | 61 | 103 | 40 | 10 | R4549.3 | R4539.3 |
| 23/64 | 9.40 | 0.3701 | 61 | 103 | 40 | 10 | R4549.4 | R4539.4 |
| | 9.50 | 0.3740 | 61 | 103 | 40 | 10 | R4549.5 | R4539.5 |
| | 9.52 | 0.3748 | 61 | 103 | 40 | 10 | R4543/8 | R4533/8 |
| | 9.60 | 0.3780 | 61 | 103 | 40 | 10 | R4549.6 | R4539.6 |
| 3/8 | 9.70 | 0.3819 | 61 | 103 | 40 | 10 | R4549.7 | R4539.7 |
| | 9.80 | 0.3858 | 61 | 103 | 40 | 10 | R4549.8 | R4539.8 |
| | 9.90 | 0.3898 | 61 | 103 | 40 | 10 | R4549.9 | R4539.9 |
| | 9.92 | 0.3906 | 61 | 103 | 40 | 10 | R45425/64 | R45325/64 |
| | 10.00 | 0.3937 | 61 | 103 | 40 | 10 | R45410.0 | R45310.0 |
| 25/64 | 10.05 | 0.3957 | 70 | 118 | 45 | 12 | | R45310.05 |

| d ₁ Ø Inch | d ₁ Øm ₇ mm | d ₁ decimal Inch | l ₂ mm | l ₁ mm | l ₃ mm | d ₂ Øh ₆ mm | R454 | R453 |
|-----------------------------|---|-----------------------------------|----------------------|----------------------|----------------------|---|-----------|-----------|
| | 10.10 | 0.3976 | 70 | 118 | 45 | 12 | R45410.1 | R45310.1 |
| | 10.20 | 0.4016 | 70 | 118 | 45 | 12 | R45410.2 | R45310.2 |
| | 10.30 | 0.4055 | 70 | 118 | 45 | 12 | R45410.3 | R45310.3 |
| 13/32 | 10.32 | 0.4063 | 70 | 118 | 45 | 12 | R45413/32 | R45313/32 |
| | 10.40 | 0.4094 | 70 | 118 | 45 | 12 | R45410.4 | R45310.4 |
| | 10.50 | 0.4134 | 70 | 118 | 45 | 12 | R45410.5 | R45310.5 |
| | 10.60 | 0.4173 | 70 | 118 | 45 | 12 | R45410.6 | R45310.6 |
| 27/64 | 10.72 | 0.4220 | 70 | 118 | 45 | 12 | R45427/64 | R45327/64 |
| | 11.00 | 0.4331 | 70 | 118 | 45 | 12 | R45411.0 | R45311.0 |
| 7/16 | 11.11 | 0.4374 | 70 | 118 | 45 | 12 | R4547/16 | R4537/16 |
| | 11.20 | 0.4409 | 70 | 118 | 45 | 12 | R45411.2 | R45311.2 |
| | 11.40 | 0.4488 | 70 | 118 | 45 | 12 | R45411.4 | R45311.4 |
| | 11.50 | 0.4528 | 70 | 118 | 45 | 12 | R45411.5 | R45311.5 |
| 29/64 | 11.51 | 0.4531 | 70 | 118 | 45 | 12 | R45429/64 | R45329/64 |
| | 11.60 | 0.4567 | 70 | 118 | 45 | 12 | R45411.6 | R45311.6 |
| | 11.80 | 0.4646 | 70 | 118 | 45 | 12 | R45411.8 | R45311.8 |
| 15/32 | 11.91 | 0.4689 | 70 | 118 | 45 | 12 | R45415/32 | R45315/32 |
| | 12.00 | 0.4724 | 70 | 118 | 45 | 12 | R45412.0 | R45312.0 |
| | 12.05 | 0.4744 | 76 | 124 | 45 | 14 | | R45312.05 |
| | 12.10 | 0.4764 | 76 | 124 | 45 | 14 | R45412.1 | |
| | 12.20 | 0.4803 | 76 | 124 | 45 | 14 | R45412.2 | R45312.2 |
| 31/64 | 12.30 | 0.4843 | 76 | 124 | 45 | 14 | R45431/64 | R45331/64 |
| | 12.50 | 0.4921 | 76 | 124 | 45 | 14 | R45412.5 | R45312.5 |
| | 12.70 | 0.5000 | 76 | 124 | 45 | 14 | R45412.7 | R45312.7 |
| 1/2 | 12.70 | 0.5000 | 76 | 124 | 45 | 14 | R4541/2 | R4531/2 |
| | 12.80 | 0.5039 | 76 | 124 | 45 | 14 | R45412.8 | R45312.8 |
| | 13.00 | 0.5118 | 76 | 124 | 45 | 14 | R45413.0 | R45313.0 |
| 33/64 | 13.10 | 0.5157 | 76 | 124 | 45 | 14 | R45433/64 | R45333/64 |
| 17/32 | 13.49 | 0.5311 | 76 | 124 | 45 | 14 | R45417/32 | R45317/32 |
| | 13.50 | 0.5315 | 76 | 124 | 45 | 14 | R45413.5 | R45313.5 |
| | 13.80 | 0.5433 | 76 | 124 | 45 | 14 | R45413.8 | R45313.8 |
| 35/64 | 13.89 | 0.5469 | 76 | 124 | 45 | 14 | R45435/64 | R45335/64 |
| | 14.00 | 0.5512 | 76 | 124 | 45 | 14 | R45414.0 | R45314.0 |
| | 14.25 | 0.5610 | 82 | 133 | 48 | 16 | R45414.25 | R45314.25 |
| 9/16 | 14.29 | 0.5626 | 82 | 133 | 48 | 16 | R4549/16 | R4539/16 |
| | 14.50 | 0.5709 | 82 | 133 | 48 | 16 | R45414.5 | R45314.5 |
| 37/64 | 14.68 | 0.5780 | 82 | 133 | 48 | 16 | R45437/64 | R45337/64 |
| | 14.80 | 0.5827 | 82 | 133 | 48 | 16 | R45414.8 | R45314.8 |
| | 15.00 | 0.5906 | 82 | 133 | 48 | 16 | R45415.0 | R45315.0 |
| 19/32 | 15.08 | 0.5937 | 82 | 133 | 48 | 16 | R45419/32 | R45319/32 |
| | 15.10 | 0.5945 | 82 | 133 | 48 | 16 | R45415.1 | R45315.1 |
| 39/64 | 15.48 | 0.6094 | 82 | 133 | 48 | 16 | R45439/64 | R45339/64 |
| | 15.50 | 0.6102 | 82 | 133 | 48 | 16 | R45415.5 | R45315.5 |
| | 15.80 | 0.6220 | 82 | 133 | 48 | 16 | R45415.8 | R45315.8 |
| 5/8 | 15.88 | 0.6252 | 82 | 133 | 48 | 16 | R4545/8 | R4535/8 |
| | 16.00 | 0.6299 | 82 | 133 | 48 | 16 | R45416.0 | R45316.0 |
| 41/64 | 16.27 | 0.6406 | 91 | 143 | 48 | 18 | R45441/64 | R45341/64 |
| | 16.50 | 0.6496 | 91 | 143 | 48 | 18 | R45416.5 | R45316.5 |
| 21/32 | 16.67 | 0.6563 | 91 | 143 | 48 | 18 | R45421/32 | R45321/32 |
| | 17.00 | 0.6693 | 91 | 143 | 48 | 18 | R45417.0 | R45317.0 |
| 43/64 | 17.07 | 0.6720 | 91 | 143 | 48 | 18 | R45443/64 | R45343/64 |
| 11/16 | 17.46 | 0.6874 | 91 | 143 | 48 | 18 | R45411/16 | R45311/16 |
| | 17.50 | 0.6890 | 91 | 143 | 48 | 18 | R45417.5 | R45317.5 |
| | 17.80 | 0.7008 | 91 | 143 | 48 | 18 | R45417.8 | R45317.8 |
| 45/64 | 17.86 | 0.7031 | 91 | 143 | 48 | 18 | R45445/64 | R45345/64 |
| | 18.00 | 0.7087 | 91 | 143 | 48 | 18 | R45418.0 | R45318.0 |
| 23/32 | 18.26 | 0.7189 | 99 | 143 | 48 | 20 | | R45323/32 |
| 23/32 | 18.26 | 0.7189 | 99 | 153 | 50 | 20 | R45423/32 | |
| | 18.50 | 0.7283 | 99 | 153 | 50 | 20 | R45418.5 | R45318.5 |
| 47/64 | 18.65 | 0.7343 | 99 | 153 | 50 | 20 | R45447/64 | R45347/64 |
| | 19.00 | 0.7480 | 99 | 153 | 50 | 20 | R45419.0 | R45319.0 |
| 3/4 | 19.05 | 0.7500 | 99 | 153 | 50 | 20 | R4543/4 | R4533/4 |
| | 19.50 | 0.7677 | 99 | 153 | 50 | 20 | R45419.5 | R45319.5 |
| | 19.80 | 0.7795 | 99 | 153 | 50 | 20 | R45419.8 | R45319.8 |
| | 20.00 | 0.7874 | 99 | 153 | 50 | 20 | R45420.0 | R45320.0 |