

High performance drill for machine drilling of Titanium alloys. Enlargement done in manual drilling. Made in France.



- Made in France
- High-speed steel
- Precise drilling
  
- 3-lip sharpening
- Cylindrical shank
- 118° tip

**Features**



**Properties and benefits**

- + 3-lip cutting: central cut with three cutting edges → High quality surface condition and circularity of the hole. Extremely robust, preferably for materials with short shavings.
- + Cylindrical shank: the diameter of the shank is equal to the diameter of the tip. → Enables versatile use on portable electrical tools and CNC machine tools.
- + 118° tip: 118° tip angle for the sharpening of the drill bit. → Suitable for general use in materials with long shavings. Enables the rapid attack of the material and simple centring.



| Code        | EAN           | Ø     | d2/CM | L  | l  | lu | QTY | PCB |
|-------------|---------------|-------|-------|----|----|----|-----|-----|
| 81491010250 | 3221910891282 | 2.5   | 2.5   | 57 | 30 | 30 | 10  | 10  |
| 81491010260 | 3221910891299 | 2.6   | 2.6   | 57 | 30 | 30 | 10  | 10  |
| 81491010270 | 3221910891305 | 2.7   | 2.7   | 61 | 33 | 33 | 10  | 10  |
| 81491010275 | 3221910891312 | 2.75  | 2.75  | 61 | 33 | 33 | 10  | 10  |
| 81491010277 | 3221910891329 | 2.77  | 2.77  | 61 | 33 | 33 | 10  | 10  |
| 81491010280 | 3221910891336 | 2.8   | 2.8   | 61 | 33 | 33 | 10  | 10  |
| 81491010290 | 3221910891343 | 2.9   | 2.9   | 61 | 33 | 33 | 10  | 10  |
| 81491010300 | 3221910891350 | 3     | 3     | 61 | 33 | 33 | 10  | 10  |
| 81491010310 | 3221910891367 | 3.1   | 3.1   | 65 | 36 | 36 | 10  | 10  |
| 81491010317 | 3221910891374 | 3.175 | 3.175 | 65 | 36 | 36 | 10  | 10  |
| 81491010320 | 3221910891381 | 3.2   | 3.2   | 65 | 36 | 36 | 10  | 10  |
| 81491010325 | 3221910891398 | 3.25  | 3.25  | 65 | 36 | 36 | 10  | 10  |
| 81491010330 | 3221910891404 | 3.3   | 3.3   | 65 | 36 | 36 | 10  | 10  |
| 81491010340 | 3221910891411 | 3.4   | 3.4   | 70 | 39 | 39 | 10  | 10  |
| 81491010350 | 3221910891428 | 3.5   | 3.5   | 70 | 39 | 39 | 10  | 10  |
| 81491010357 | 3221910891435 | 3.572 | 3.572 | 70 | 39 | 39 | 10  | 10  |
| 81491010360 | 3221910891442 | 3.6   | 3.6   | 70 | 39 | 39 | 10  | 10  |
| 81491010370 | 3221910891459 | 3.7   | 3.7   | 70 | 39 | 39 | 10  | 10  |
| 81491010375 | 3221910891466 | 3.75  | 3.75  | 70 | 39 | 39 | 10  | 10  |
| 81491010380 | 3221910891473 | 3.8   | 3.8   | 75 | 43 | 43 | 10  | 10  |
| 81491010390 | 3221910891480 | 3.9   | 3.9   | 75 | 43 | 43 | 10  | 10  |
| 81491010396 | 3221910891497 | 3.969 | 3.969 | 75 | 43 | 43 | 10  | 10  |
| 81491010400 | 3221910891503 | 4     | 4     | 75 | 43 | 43 | 10  | 10  |
| 81491010410 | 3221910891510 | 4.1   | 4.1   | 75 | 43 | 43 | 10  | 10  |
| 81491010420 | 3221910891527 | 4.2   | 4.2   | 75 | 43 | 43 | 10  | 10  |
| 81491010425 | 3221910891534 | 4.25  | 4.25  | 75 | 43 | 43 | 10  | 10  |
| 81491010430 | 3221910891541 | 4.3   | 4.3   | 80 | 47 | 47 | 10  | 10  |
| 81491010436 | 3221910891558 | 4.366 | 4.366 | 80 | 47 | 47 | 10  | 10  |

High performance drill for machine drilling of Titanium alloys. Enlargement done in manual drilling. Made in France.

|             |               |       |       |     |    |    |    |    |
|-------------|---------------|-------|-------|-----|----|----|----|----|
| 81491010440 | 3221910891565 | 4.4   | 4.4   | 80  | 47 | 47 | 10 | 10 |
| 81491010450 | 3221910891572 | 4.5   | 4.5   | 80  | 47 | 47 | 10 | 10 |
| 81491010460 | 3221910891589 | 4.6   | 4.6   | 80  | 47 | 47 | 10 | 10 |
| 81491010470 | 3221910891596 | 4.7   | 4.7   | 80  | 47 | 47 | 10 | 10 |
| 81491010475 | 3221910891602 | 4.75  | 4.75  | 80  | 47 | 47 | 10 | 10 |
| 81491010476 | 3221910891619 | 4.762 | 4.762 | 86  | 52 | 52 | 10 | 10 |
| 81491010480 | 3221910891626 | 4.8   | 4.8   | 86  | 52 | 52 | 10 | 10 |
| 81491010490 | 3221910891633 | 4.9   | 4.9   | 86  | 52 | 52 | 10 | 10 |
| 81491010500 | 3221910891640 | 5     | 5     | 86  | 52 | 52 | 10 | 10 |
| 81491010510 | 3221910891657 | 5.1   | 5.1   | 86  | 52 | 52 | 10 | 10 |
| 81491010515 | 3221910891664 | 5.159 | 5.159 | 86  | 52 | 52 | 10 | 10 |
| 81491010520 | 3221910891671 | 5.2   | 5.2   | 86  | 52 | 52 | 10 | 10 |
| 81491010525 | 3221910891688 | 5.25  | 5.25  | 86  | 52 | 52 | 10 | 10 |
| 81491010530 | 3221910891695 | 5.3   | 5.3   | 86  | 52 | 52 | 10 | 10 |
| 81491010540 | 3221910891701 | 5.4   | 5.4   | 93  | 57 | 57 | 10 | 10 |
| 81491010550 | 3221910891718 | 5.5   | 5.5   | 93  | 57 | 57 | 10 | 10 |
| 81491010555 | 3221910891725 | 5.556 | 5.556 | 93  | 57 | 57 | 10 | 10 |
| 81491010560 | 3221910891732 | 5.6   | 5.6   | 93  | 57 | 57 | 10 | 10 |
| 81491010570 | 3221910891749 | 5.7   | 5.7   | 93  | 57 | 57 | 10 | 10 |
| 81491010575 | 3221910891756 | 5.75  | 5.75  | 93  | 57 | 57 | 10 | 10 |
| 81491010580 | 3221910891763 | 5.8   | 5.8   | 93  | 57 | 57 | 10 | 10 |
| 81491010590 | 3221910891770 | 5.9   | 5.9   | 93  | 57 | 57 | 10 | 10 |
| 81491010595 | 3221910891787 | 5.953 | 5.953 | 93  | 57 | 57 | 10 | 10 |
| 81491010600 | 3221910891794 | 6     | 6     | 93  | 57 | 57 | 10 | 10 |
| 81491010610 | 3221910891800 | 6.1   | 6.1   | 101 | 63 | 63 | 10 | 10 |
| 81491010620 | 3221910891817 | 6.2   | 6.2   | 101 | 63 | 63 | 10 | 10 |
| 81491010625 | 3221910891824 | 6.25  | 6.25  | 101 | 63 | 63 | 10 | 10 |
| 81491010630 | 3221910891831 | 6.3   | 6.3   | 101 | 63 | 63 | 10 | 10 |
| 81491010635 | 3221910891848 | 6.35  | 6.35  | 101 | 63 | 63 | 10 | 10 |
| 81491010640 | 3221910891855 | 6.4   | 6.4   | 101 | 63 | 63 | 10 | 10 |
| 81491010650 | 3221910891862 | 6.5   | 6.5   | 101 | 63 | 63 | 10 | 10 |
| 81491010660 | 3221910891879 | 6.6   | 6.6   | 101 | 63 | 63 | 10 | 10 |
| 81491010670 | 3221910891886 | 6.7   | 6.7   | 101 | 63 | 63 | 10 | 10 |
| 81491010674 | 3221910891893 | 6.747 | 6.747 | 109 | 69 | 69 | 10 | 10 |
| 81491010675 | 3221910891909 | 6.75  | 6.75  | 109 | 69 | 69 | 10 | 10 |
| 81491010680 | 3221910891916 | 6.8   | 6.8   | 109 | 69 | 69 | 10 | 10 |
| 81491010690 | 3221910891923 | 6.9   | 6.9   | 109 | 69 | 69 | 10 | 10 |
| 81491010700 | 3221910891930 | 7     | 7     | 109 | 69 | 69 | 10 | 10 |
| 81491010710 | 3221910891947 | 7.1   | 7.1   | 109 | 69 | 69 | 10 | 10 |
| 81491010714 | 3221910891954 | 7.144 | 7.144 | 109 | 69 | 69 | 10 | 10 |
| 81491010720 | 3221910891961 | 7.2   | 7.2   | 109 | 69 | 69 | 10 | 10 |
| 81491010725 | 3221910891978 | 7.25  | 7.25  | 109 | 69 | 69 | 10 | 10 |
| 81491010730 | 3221910891985 | 7.3   | 7.3   | 109 | 69 | 69 | 10 | 10 |
| 81491010740 | 3221910891992 | 7.4   | 7.4   | 109 | 69 | 69 | 10 | 10 |
| 81491010750 | 3221910892005 | 7.5   | 7.5   | 109 | 69 | 69 | 10 | 10 |
| 81491010754 | 3221910892012 | 7.541 | 7.541 | 117 | 75 | 75 | 10 | 10 |
| 81491010760 | 3221910892029 | 7.6   | 7.6   | 117 | 75 | 75 | 10 | 10 |
| 81491010770 | 3221910892036 | 7.7   | 7.7   | 117 | 75 | 75 | 10 | 10 |
| 81491010775 | 3221910892043 | 7.75  | 7.75  | 117 | 75 | 75 | 10 | 10 |
| 81491010780 | 3221910892050 | 7.8   | 7.8   | 117 | 75 | 75 | 10 | 10 |
| 81491010790 | 3221910892067 | 7.9   | 7.9   | 117 | 75 | 75 | 10 | 10 |
| 81491010793 | 3221910892074 | 7.938 | 7.938 | 117 | 75 | 75 | 10 | 10 |
| 81491010800 | 3221910892081 | 8     | 8     | 117 | 75 | 75 | 5  | 10 |
| 81491010810 | 3221910892098 | 8.1   | 8.1   | 117 | 75 | 75 | 5  | 5  |
| 81491010820 | 3221910892104 | 8.2   | 8.2   | 117 | 75 | 75 | 5  | 5  |
| 81491010825 | 3221910892111 | 8.25  | 8.25  | 117 | 75 | 75 | 5  | 5  |
| 81491010830 | 3221910892128 | 8.3   | 8.3   | 117 | 75 | 75 | 5  | 5  |
| 81491010833 | 3221910892135 | 8.334 | 8.334 | 117 | 75 | 75 | 5  | 5  |
| 81491010840 | 3221910892142 | 8.4   | 8.4   | 117 | 75 | 75 | 5  | 5  |
| 81491010850 | 3221910892159 | 8.5   | 8.5   | 117 | 75 | 75 | 5  | 5  |
| 81491010860 | 3221910892166 | 8.6   | 8.6   | 125 | 81 | 81 | 5  | 5  |
| 81491010870 | 3221910892173 | 8.7   | 8.7   | 125 | 81 | 81 | 5  | 5  |
| 81491010873 | 3221910892180 | 8.731 | 8.731 | 125 | 81 | 81 | 5  | 5  |
| 81491010875 | 3221910892197 | 8.75  | 8.75  | 125 | 81 | 81 | 5  | 5  |
| 81491010880 | 3221910892203 | 8.8   | 8.8   | 125 | 81 | 81 | 5  | 5  |

High performance drill for machine drilling of Titanium alloys. Enlargement done in manual drilling. Made in France.

|             |               |       |       |     |    |    |   |   |
|-------------|---------------|-------|-------|-----|----|----|---|---|
| 81491010890 | 3221910892210 | 8.9   | 8.9   | 125 | 81 | 81 | 5 | 5 |
| 81491010900 | 3221910892227 | 9     | 9     | 125 | 81 | 81 | 5 | 5 |
| 81491010910 | 3221910892234 | 9.1   | 9.1   | 125 | 81 | 81 | 5 | 5 |
| 81491010912 | 3221910892241 | 9.128 | 9.128 | 125 | 81 | 81 | 5 | 5 |
| 81491010920 | 3221910892258 | 9.2   | 9.2   | 125 | 81 | 81 | 5 | 5 |
| 81491010925 | 3221910892265 | 9.25  | 9.25  | 125 | 81 | 81 | 5 | 5 |
| 81491010930 | 3221910892272 | 9.3   | 9.3   | 125 | 81 | 81 | 5 | 5 |
| 81491010940 | 3221910892289 | 9.4   | 9.4   | 125 | 81 | 81 | 5 | 5 |
| 81491010950 | 3221910892296 | 9.5   | 9.5   | 125 | 81 | 81 | 5 | 5 |
| 81491010952 | 3221910892302 | 9.525 | 9.525 | 133 | 87 | 87 | 5 | 5 |
| 81491010960 | 3221910892319 | 9.6   | 9.6   | 133 | 87 | 87 | 5 | 5 |
| 81491010970 | 3221910892326 | 9.7   | 9.7   | 133 | 87 | 87 | 5 | 5 |
| 81491010975 | 3221910892333 | 9.75  | 9.75  | 133 | 87 | 87 | 5 | 5 |
| 81491010980 | 3221910892340 | 9.8   | 9.8   | 133 | 87 | 87 | 5 | 5 |
| 81491010990 | 3221910892357 | 9.9   | 9.9   | 133 | 87 | 87 | 5 | 5 |
| 81491010992 | 3221910892364 | 9.922 | 9.922 | 133 | 87 | 87 | 5 | 5 |
| 81491011000 | 3221910892371 | 10    | 10    | 133 | 87 | 87 | 5 | 5 |