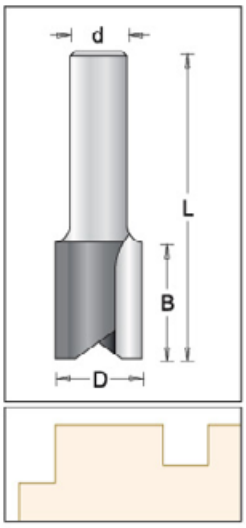


Frez prosty



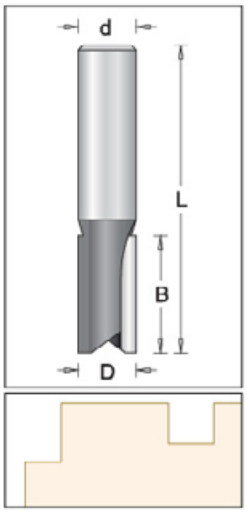


D	B	Kod	L	d
4.0	11	107 004 9 *	63	12
5.0	11	107 007 9 *	60	12
6.0	19	107 010 9 *	64	12
7.0	19	107 016 9	63	12
8.0	19	107 022 9	63	12
	25	107 025 9	69	12
10.0	19	107 028 9	63	12
	25	107 031 9	69	12
	32	107 034 9	76	12
12.0	25	107 046 9	66	12
	32	107 049 9	73	12
	38	107 052 9	79	12
	51	107 055 9	108	12
13.5	32	107 057 9	73	12
14.0	25	107 061 9	66	12
15.0	19	107 065 9	60	12
	25	107 064 9	66	12
16.0	25	107 070 9	66	12
	32	107 073 9	73	12
	38	107 076 9	79	12
16.7	32	107 077 9	73	12
17.0	32	107 075 9	73	12
18.0	25	107 084 9	66	12
	32	107 085 9	73	12
	51	107 082 9	92	12
19.0	25	107 091 9	66	12
	32	107 094 9	73	12
	38	107 097 9	79	12
19.8	32	107 099 9	73	12
20.0	25	107 103 9	66	12
	32	107 106 9	73	12
	51	107 098 9	92	12
22.0	25	107 112 9	66	12
	32	107 115 9	73	12
	51	107 120 9	92	12
24.0	19	107 119 9	60	12
25.0	25	107 121 9	66	12
	32	107 124 9	73	12
	38	107 127 9	79	12
26.0	25	107 132 9	66	12
27.0	32	107 128 9	73	12
28.0	25	107 134 9	66	12
28.6	32	107 129 9	73	12
30.0	25	107 130 9	66	12
	32	107 133 9	73	12
35.0	25	107 136 9	66	12
	32	107 139 9	73	12
40.0	25	107 142 9	66	12
	32	107 145 9	73	12
51.0	32	107 195 9	73	12

* Ostrze monolityczne z HM



Frez prosty



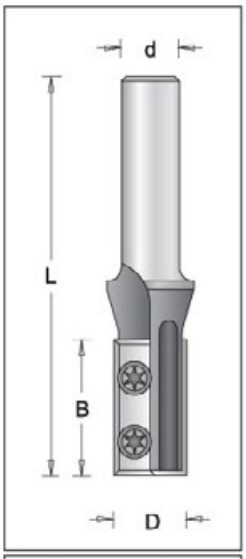


D	B	Kod	L	d
6.3	12.7	107 509 9 *	57.0	12
	19.0	107 510 9 *	63.5	12
6.3	25.4	107 513 9	70.0	12
8.0	19.0	107 522 9	63.5	12
	25.4	107 525 9	70.0	12
9.5	19.0	107 528 9	63.5	12
	25.4	107 531 9	70.0	12
	31.7	107 534 9	76.2	12
11.1	25.4	107 540 9	70.0	12
	31.7	107 542 9	76.2	12
12.7	25.4	107 546 9	66.7	12
	31.7	107 549 9	73.0	12
	31.7	L 107 549 9	81.0	12
	38.0	107 582 9	79.0	12
	50.8	107 583 9	108.0	12
	63.5	107 584 9	114.3	12
14.2	25.4	107 552 9	66.7	12
	31.7	107 585 9	73.0	12
15.8	25.4	107 558 9	66.7	12
	31.7	107 588 9	73.0	12
	38.0	107 591 9	79.3	12
	50.8	107 592 9	92.0	12
17.4	25.4	107 593 9	66.7	12
	31.7	107 594 9	73.0	12
19.0	25.4	107 597 9	66.7	12
	31.7	107 600 9	73.0	12
	38.0	107 603 9	79.3	12
	50.8	107 604 9	92.0	12
19.8	31.7	107 566 9	73.0	12
20.6	25.4	107 606 9	66.7	12
	31.7	107 609 9	73.0	12
22.2	25.4	107 612 9	66.7	12
	31.7	107 615 9	73.0	12
25.4	25.4	107 618 9	66.7	12
	31.7	107 621 9	73.0	12
	38.0	107 624 9	79.3	12
	50.8	107 625 9	92.0	12
31.7	25.4	107 627 9	66.7	12
	31.7	107 630 9	73.0	12
35.0	25.4	107 633 9	66.7	12
	31.7	107 636 9	73.0	12
38.0	31.7	107 637 9	73.0	12
42.1	25.4	107 639 9	66.7	12
	31.7	107 642 9	73.0	12
44.4	31.7	107 645 9	73.0	12
47.6	31.7	107 648 9	73.0	12
50.8	31.7	107 649 9	73.0	12

* Ostrze monolityczne z HM



Frez prosty





D	B	Kod	L	d
14	30	107 311 9 *	86	12
15	30	107 313 9	86	12
16	30	107 312 9	88	12

Części zamienne:


Płytka HM
#310 793 0
30x9x1.5


Wkręt torx
#193 354 8
M3.5x4.8


Wkręt torx *
#193 364 8
M3.5x4.8


Klucz torx
#194 101 5
T15

D	B	Kod	L	d
18	30	107 316 9	88	12
20	30	107 320 9	88	12
22	30	107 324 9	88	12
25	30	107 329 9	88	12

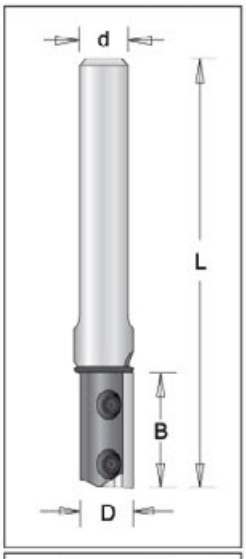
Części zamienne:


Płytka HM
#310 723 0
30x12x1.5


Wkręt torx
#193 148 2
M4x5.6


Klucz torx
#194 101 5
T15

Frez prosty





D	B	Kod	L	d	T
10	20	807 1059	71	12	1
12	30	807 1119 *	81	12	2

Części zamienne:


Płytka HM
310 751 0
20x5.5x1.1


Płytka HM *
310 751 1
30x5.5x1.1


Wkręt imbusowy
193 035 0
M3x4


Wkręt imbusowy *
193 036 0
M3x5

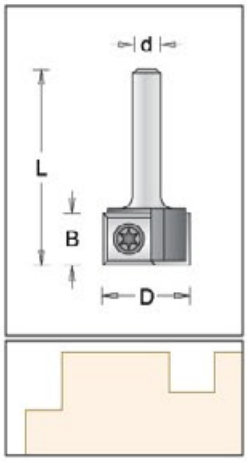

Podkładki
196 205 0
7.0x1


Podkładki *
196 207 0
9.5x1


Klucz imbusowy
194 102 0
S1.5



Frez podcinający





D	B	Kod	L	d
18	12	107 301 3	44	6
	12	107 301 5	44	8
	12	107 301 9	50	12
20	12	107 302 3	44	6
	12	107 302 5	45	8
	12	107 302 9	50	12
22	12	107 303 3	44	6
	12	107 303 5	44	8
	12	107 303 9	50	12

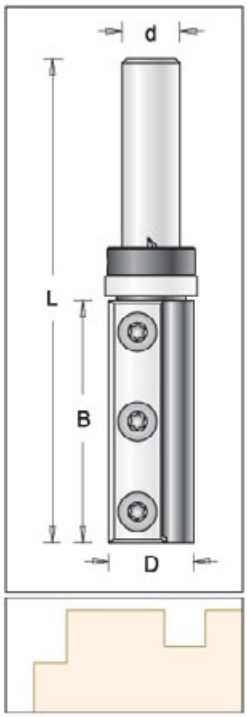
Części zamienne:


Płytka HM
#310 121 2
12x12x1.5


Wkręt torx
#193 148 2
M4x5.6


Klucz torx
#194 101 5
T15

Frez prosty przycinający



D	B	Kod	L	d
19.3*	30	1073 85 9	80	12
19	50	1073 89 9	101.6	12

Części zamienne:


Płytka HM*
#310 723 0
30x12x1.5


Płytka HM
#310 735 0
50x12x1.7

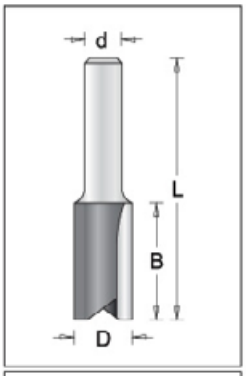

D.Łożysko
#191 020 0 1
19x32x12.7


Wkręt torx
#193 148 2
M4x5.6


Klucz torx
#194 101 5
T15



Frez prosty





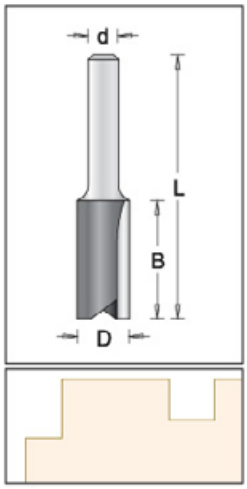


D	B	Kod	L	d
3	11	107 001 5 *	51	8
4	11	107 004 5 *	51	8
5	11	107 007 5 *	51	8
6	19	107 010 5 *	57	8
	25	107 013 5	63	8
7	19	107 016 5	57	8
8	19	107 022 5	57	8
	25	107 025 5	63	8
	25	L107 025 5	80	8
10	19	107 028 5	51	8
	25	107 031 5	57	8
	32	107 034 5	64	8
	32	L107 034 5	80	8
11	19	107 037 5	51	8
	25	107 040 5	57	8
12	19	107 043 5	51	8
	25	107 046 5	57	8
	32	107 049 5	64	8
	32	L107 049 5	80	8
13	19	107 056 5	51	8
14	19	107 058 5	51	8
	19	L107 058 5	70	8
	25	107 061 5	57	8
15	19	107 065 5	51	8
16	19	107 067 5	51	8
	25	107 070 5	57	8
	25	L107 070 5	85	8
18	19	107 079 5	51	8
	19	L107 079 5	70	8
19	19	107 088 5	51	8
20	19	107 100 5	51	8
	19	L107 100 5	70	8
22	19	107 109 5	51	8
	19	L107 109 5	70	8
24	19	107 119 5	51	8
25	19	107 118 5	51	8
26	19	107 131 5	51	8
28	19	107 126 5	51	8

* Ostrze monolityczne z HM



Frez prosty



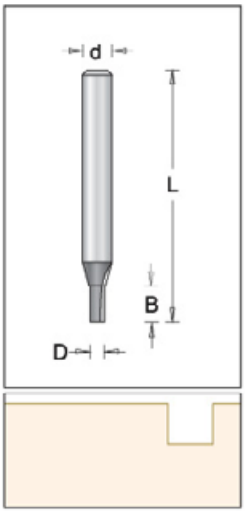


D	B	Kod	L	d
1.3	4.5	107 833 3 *	47	6
1.5	4.5	107 834 3 *	47	6
2.0	6.5	107 835 3 *	47	6
2.5	8.0	107 012 3 *	48	6
3.0	8.0	107 801 3 *	41	6
	8.0	107 802 3 *	55	6
	11.0	107 001 3 *	51	6
	11.0	X107 001 3 *	60	6
4.0	11.0	107 004 3 *	51	6
	11.0	X107 004 3 *	60	6
5.0	11.0	107 007 3 *	51	6
	16.0	107 008 3 *	56	6
6.0	16.0	107 011 3	48	6
	19.0	107 010 3	51	6
	25.0	107 013 3	57	6
6.5	19.0	107 014 3	51	6
	25.0	107 017 3	57	6
7.0	19.0	107 016 3	51	6
	25.0	107 019 3	57	6
8.0	19.0	107 022 3	51	6
	19.0	L 107 022 3	65	6
	25.0	107 025 3	57	6
8.5	19.0	107 026 3	51	6
9.0	19.0	107 027 3	51	6
10.0	19.0	107 028 3	51	6
	25.0	107 031 3	57	6
	32.0	107 034 3	64	6
10.3	19.0	107 035 3	51	6
11.0	19.0	107 037 3	51	6
	25.0	107 040 3	57	6
11.3	19.0	107 041 3	51	6
12.0	19.0	107 043 3	51	6
	25.0	107 046 3	57	6
	32.0	107 049 3	64	6
13.0	19.0	107 056 3	51	6
	25.0	107 054 3	57	6
	32.0	107 042 3	64	6
14.0	19.0	107 058 3	51	6
14.5	19.0	107 059 3	51	6
15.0	19.0	107 065 3	51	6
	25.0	107 064 3	57	6
	32.0	107 066 3	64	6
16.0	19.0	107 067 3	51	6
	25.0	107 070 3	57	6
	32.0	107 072 3	64	6
17.0	19.0	107 078 3	51	6
18.0	19.0	107 079 3	51	6
18.2	19.0	107 086 3	51	6
19.0	19.0	107 088 3	51	6
	25.0	107 089 3	57	6
20.0	16.0	107 099 3	48	6
	19.0	107 100 3	51	6
20.2	19.0	107 107 3	51	6
21.0	19.0	107 108 3	51	6
22.0	19.0	107 109 3	51	6
25.0	19.0	107 118 3	51	6

* Ostrze monolityczne z HM



Frez prosty



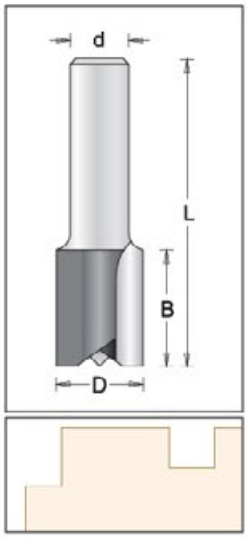


D	B	Kod	L	d
2.4	6.3	107 500 3 *	30.1	6
3.1	11.1	107 501 3 *	50.8	6
4.0	11.1	107 504 3 *	50.8	6
4.7	11.1	107 507 3 *	50.8	6
	15.8	107 506 3 *	55.5	6
5.5	19.0	107 505 3	50.8	6
6.7	12.7	107 509 3	44.5	6
	15.8	107 520 3	47.6	6
	19.0	107 510 3	50.8	6
	25.4	107 513 3	57.0	6
	25.4	107 514 3	73.0	6
7.1	19.0	107 516 3	50.8	6
	25.4	107 519 3	57.0	6
8.0	19.0	107 522 3	50.8	6
	25.4	107 525 3	57.0	6
	25.4	L 107 525 3	70.0	6
9.5	19.0	107 528 3	50.8	6
	25.4	107 531 3	57.0	6
	31.7	107 534 3	63.5	6
11.0	19.0	107 537 3	50.8	6
	25.4	107 540 3	57.0	6
12.7	19.0	107 543 3	50.8	6
	25.4	107 546 3	57.0	6
	31.7	107 549 3	63.5	6
14.2	19.0	107 551 3	50.7	6
	25.4	107 552 3	57.0	6
15.8	19.0	107 555 3	50.8	6
	25.4	107 558 3	57.0	6
17.5	19.0	107 561 3	50.8	6
	25.4	107 562 3	57.0	6
19.0	19.0	107 564 3	50.8	6
	25.4	107 565 3	57.0	6
20.6	19.0	107 567 3	50.8	6
22.2	19.0	107 570 3	50.8	6
25.4	19.0	107 573 3	50.8	6

* Ostrze monolityczne z HM



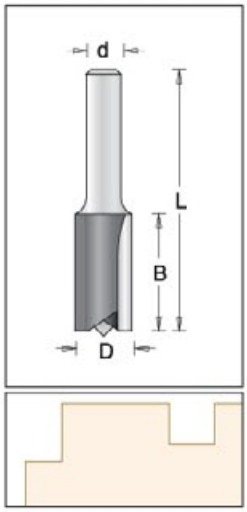
Frez prosty z płytką centrującą





D	B	Kod	L	d
8	19	107 722 9	63	12
10	19	107 728 9	63	12
12	25	107 746 9	67	12
	38	107 752 9	79	12
	51	107 755 9	108	12
14	19	107 758 9	61	12
	25	107 761 9	67	12
15	25	107 764 9	67	12
16	19	107 767 9	61	12
	25	107 770 9	67	12
	32	107 773 9	73	12
	38	107 776 9	79	12
17	25	107 778 9	65	12
18	25	107 784 9	67	12
19	25	107 789 9	67	12
20	25	107 703 9	67	12
22	32	107 715 9	73	12

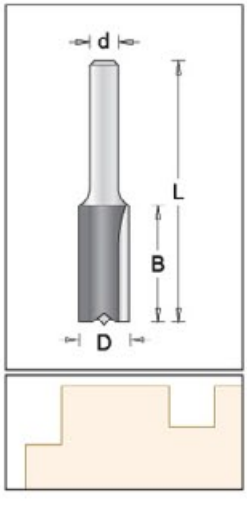
Frez prosty z płytką centrującą





D	B	Kod	L	d
8	19	107 722 5	57	8
10	19	107 728 5	51	8
12	19	107 743 5	51	8
	25	107 746 5	57	8
	32	107 749 5	63	8
14	19	107 758 5	51	8
	25	107 761 5	57	8
16	19	107 767 5	51	8
	25	107 770 5	57	8
18	19	107 779 5	51	8
	25	107 784 5	57	8
19	25	107 789 5	57	8
20	19	107 700 5	51	8

Frez prosty z płytką centrującą

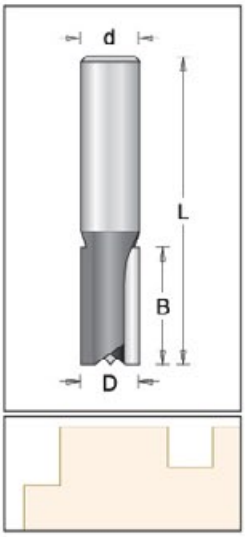




D	B	Kod	L	d
8.0	19.0	107 422 3	50.8	6
9.5	19.0	107 428 3	50.8	6
	25.4	107 431 3	57.0	6
	31.7	107 434 3	63.5	6
12.7	19.0	107 443 3	50.8	6
	25.4	107 445 3	66.0	6
	25.4	107 446 3	54.0	6
15.8	19.0	107 455 3	50.8	6
22.2	19.0	107 470 3	50.8	6
25.4	19.0	107 473 3	50.8	6



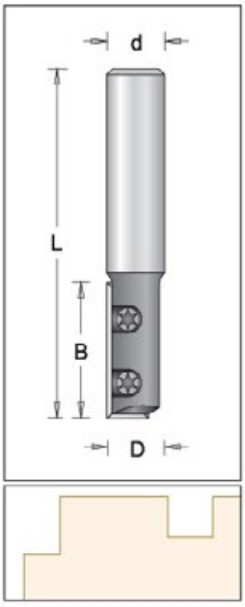
Frez prosty z płytką centrującą





D	B	Kod	L	d
8.0	19.0	107 422 9	63.5	12
9.5	31.7	107 434 9	76.2	12
11.0	25.4	107 440 9	70.0	12
12.7	25.4	107 446 9	66.7	12
	31.7	107 449 9	73.0	12
	38.0	107 482 9	79.3	12
	50.8	107 483 9	108.0	12
16.0	31.8	107 488 9	73.0	12
	50.8	107 492 9	95.0	12
19.0	25.4	107 465 9	67.0	12
22.2	31.8	107 415 9	73.0	12
25.4	25.4	107 418 9	67.0	12
41.3	25.4	107 739 9	67.0	12
44.5	31.8	107 745 9	73.0	12
47.6	31.8	107 748 9	73.0	12

Frez prosty penetrujący





D	B	Kod	L	d
12	30	107 350 9	77	12
14	30	107 354 9	77	12
15	30	107 355 9	77	12

Części zamienne:

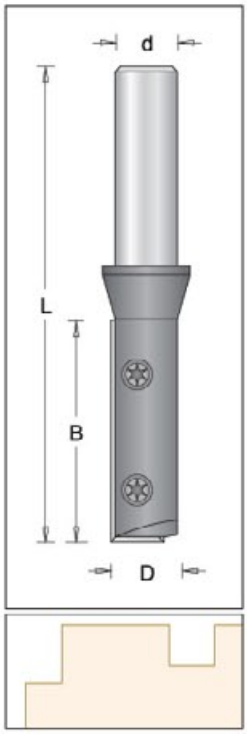

Płytka HM
#310 793 0
9x30x1.5


Wkręt torx
#193 354 8
M3.5x0.6


Klucz torx
#194 101 5
T15



Frez prosty penetrujący





D	B	Kod	L	d
16	50	107 360 9	107	12
18	50	107 364 9	107	12
20	50	107 368 9	107	12
22	50	107 372 9	107	12

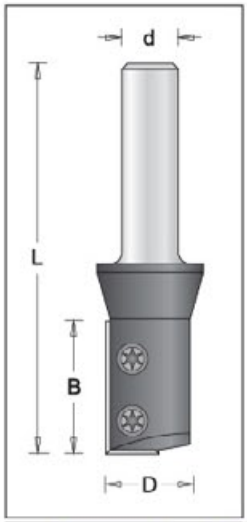
Części zamienne:

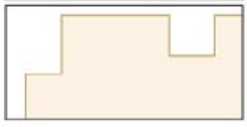

Płytka HM
#310 725 0
50x12x1.5


Wkręt torx
#193 354 8
M3.5x4.8


Klucz torx
#194 101 5
T15

Frez prosty penetrujący







D	B	Kod	L	d
16.0	30.0	107 358 9	88	12
18.0	30.0	107 362 9	88	12
20.0	30.0	107 366 9	88	12
22.0	30.0	107 370 9	88	12
15.9	30.0	107 382 9	88	12

Części zamienne:


Płytka HM
#310 723 0
30x12x1.5

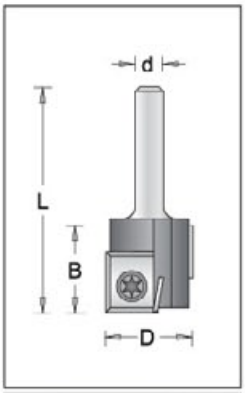

Wkręt torx
#193 354 8
M3.5x4.8


Klucz torx
#194 101 5
T15



Stopniowy frez prosty penetrujący





D	B	Kod	L	d
18	20	107 306 3	52	6
	20	107 306 5	52	8
	20	107 306 9	60	12
20	20	107 307 3	52	6
	20	107 307 5	52	8
	20	107 307 9	60	12
22	20	107 308 3	52	6
	20	107 308 5	52	8
	20	107 308 9	60	12



Części zamienne:

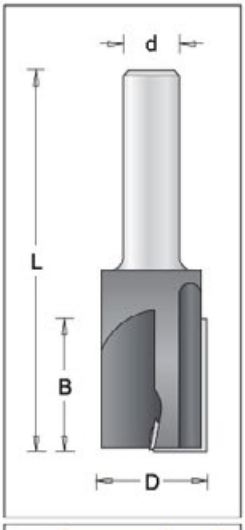

Płytka HM
#310 121 2
12x12x1.5


Wkręt torx
#193 148 2
M4x5.6

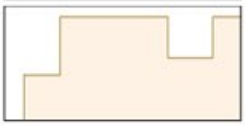

Klucz torx
#194 101 5
T15

Frez prosty penetrujący





D	B	Kod	L	d
25	30	107 378 9	86	12



Części zamienne:


Płytka HM
#310 723 0
30x12x1.5


Płytka HM
#310 751 2
7.5x12x1.5

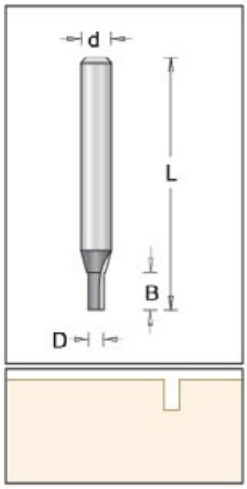

Wkręt torx
#193 148 1
M4x5.6


Wkręt torx
#193 148 2
M4x5.6


Klucz torx
#194 101 5
T15



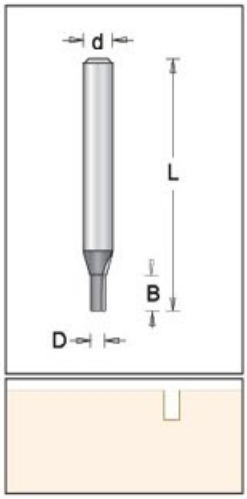
Frez prosty z ostrzem monolitycznym HM





D	B	Kod	L	d
4.0	11.1	so 107 504 4	50.8	6.35
4.7	11.1	so 107 507 4	50.8	6.35
	12.7	so 107 836 4	50.8	6.35
6.3	12.7	so 107 509 4	50.8	6.35
5.5	19.0	so 107 505 4	50.8	6.35
6.3	19.0	so 107 510 4	50.8	6.35
	19.0	soL 107 510 4	63.5	6.35
	50.8	soL 107 513 4	63.5	6.35

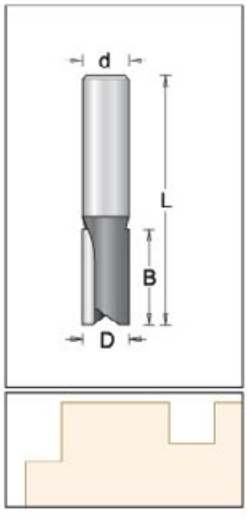
Frez prosty z ostrzem monolitycznym HM





D	B	Kod	L	d
3	11	so 107 001 3	60	6
4	11	so 107 004 3	60	6
5	11	so 107 007 3	60	6
6	19	so 107 010 3	60	6
	19	soL 107 010 3	63	6
	25	soL 107 013 3	63	6

Frez prosty - z lewoskrętną rotacją

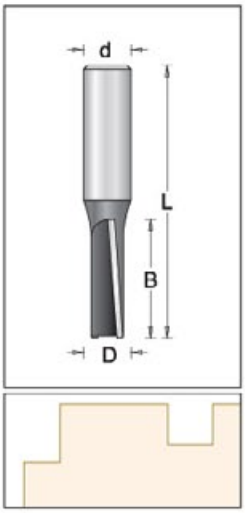




D	B	Kod	L	d
8.0	25	107 525 9L	70.0	12
9.5	25	107 531 9L	70.0	12
12.7	31.7	107 549 9L	73.0	12
	38.1	107 582 9L	79.3	12
	50.8	107 583 9L	108.0	12
19.0	31.7	107 600 9L	73.0	12
	50.8	107 604 9L	92	12



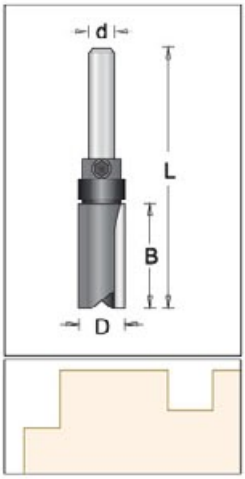
Frez prosty z płytką ukośną





D	B	Kod	L	d
9.5	25.4	107 531 3S	54.0	6
	25.4	107 531 9S	70.0	12
12.7	31.8	107 549 9S	73.0	12
	38.0	107 582 9S	79.0	12
	50.8	107 583 9S	107.5	12

Frez prosty - do profilowania przy użyciu szablonów





D	B	Kod	L	d	
6.3	12.7	1072 40 3	51	6.0	A
12.7	25.4	1072 46 3	63	6.0	A
12.7	32.0	1072 48 3	69	6.0	A
15.9	25.4	1072 58 3	63	6.0	B
16.0	32.0	1072 59 5	77	8.0	E
19.1	25.4	1072 66 3	63	6.0	C
19.1	25.4	1072 97 9	77	12.0	D
19.1	50.8	1072 04 9	92	12.0	D
25.4	44.5	1072 22 9	95	12.0	G
28.6	38.1	1072 39 9	92	12.0	F
31.8	44.5	1072 37 9	98	12.0	H

Części zamienne:



A.Łożysko
#191 003 0
12.7x6.3x4.7



B.Łożysko
#191 005 0
15.9x6.3x5.0



C.Łożysko
#191 014 0
19.1x6.3x7



D.Łożysko
#191 020 0
19.1x12.7x4

E.Łożysko
#191 024 0
16x8x5

F.Łożysko
#191 018 0
28.5x12.7x7.94

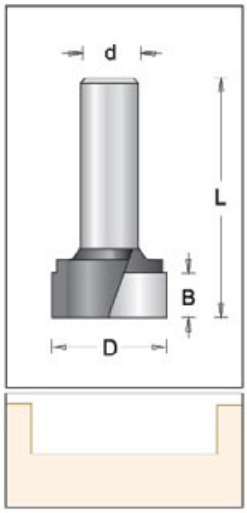
G.Łożysko
#191 921 0
25.4x15x6

H.Łożysko
#191 922 0
31.8x15x8.5



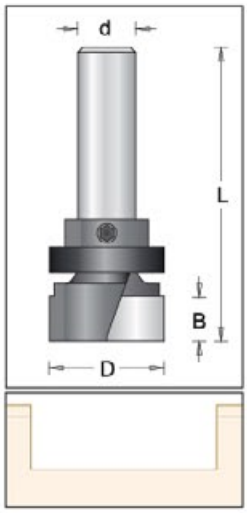
Frez czyszczący do powierzchni płaskich





D	B	Kod	L	d
19.1	11.1	1640 07 3	57.0	6
	11.1	1640 07 9	63.5	12
25.4	11.1	1640 14 9	64.0	12
38.1	16.0	1640 18 9	69.0	12





D	B	Kod	L	d	
19.1	11.1	1642 07 3	57.0	6	A
	11.1	1642 07 9	63.5	12	B
25.4	11.1	1642 14 9	64.0	12	C
38.1	16.0	1642 18 9	69.0	12	D

Części zamienne:



A.Łożysko
#191 014 0
19x6.3x7



B.Łożysko
#191 020 0
19x12.7x4



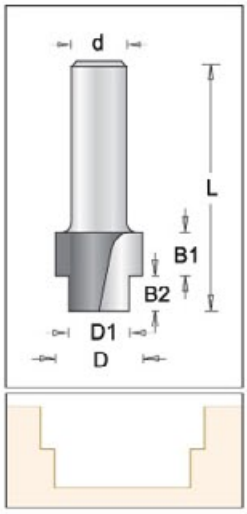
C.Łożysko
#191 921 0
15x25.4x6



D.Łożysko
#191 922 1
15x38.1x3

Frez dwustopniowy do wręgowania





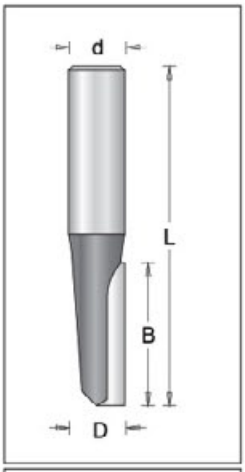
D	D1	Kod	B1	B2	L	d
19	9.5	1141 08 3	12.7	6.3	47.6	6
19	12.7	1141 09 3	9.5	6.3	50.8	6
22	14.0	1141 10 9	8.0	9.5	57.0	12





Frez prosty z pojedynczą płytką



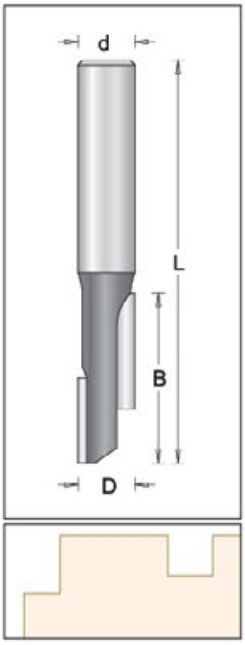


D	B	Kod	L	d
3.0	11.1	1250 02 3 *	51.0	6
3.2	11.1	1250 01 3 *	51.0	6
4.0	11.1	1250 04 3 *	51.0	6
4.8	11.1	1250 07 3 *	51.0	6
6.3	12.7	1250 10 3	51.0	6
	19.1	1250 13 3	51.0	6
	25.4	1250 16 3	57.0	6
7.9	25.4	1250 23 3	57.0	6
12.7	25.4	1250 28 3	54.0	6
15.9	19.1	1250 38 3	49.0	6
19.1	19.1	1250 40 3	47.0	6
6.3	19.1	1250 13 9	65.0	12
	25.4	1250 16 9	68.5	12
7.9	19.1	1250 19 9	63.5	12
	25.4	1250 23 9	71.5	12
9.5	25.4	1250 22 9	70.0	12
	31.8	1250 25 9	76.0	12
12.7	25.4	1250 28 9	63.5	12
	31.8	1250 31 9	73.0	12
	38.1	1250 34 9	79.0	12
	50.8	1250 35 9	108.0	12
15.9	31.8	1250 37 9	73.0	12

* Ostrze monolityczne HM

Stopniowy frez prosty

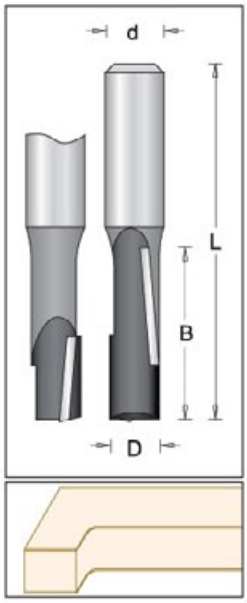




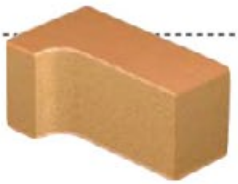
D	B	Kod	L	d
12.7	38.1	1260 10 9	79.4	12
	54.0	1260 14 9	108.0	12
16.0	51.0	1260 23 9	103.0	12



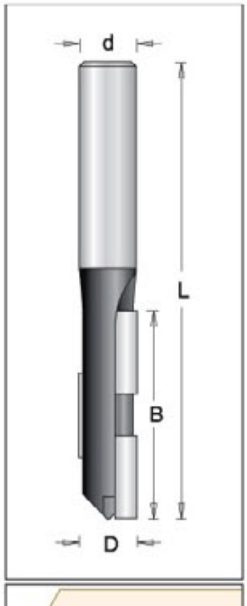
Stopniowy frez prosty z płytkami ukośnymi

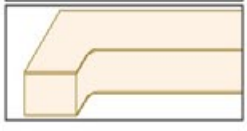


D	B	Kod	L	d
12.7	38.1	1260 10 9s	79	12
	54.0	1260 14 9s	108	12

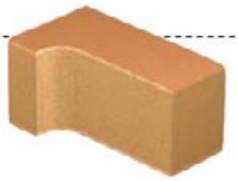


Stopniowy frez prosty z płytką centrującą



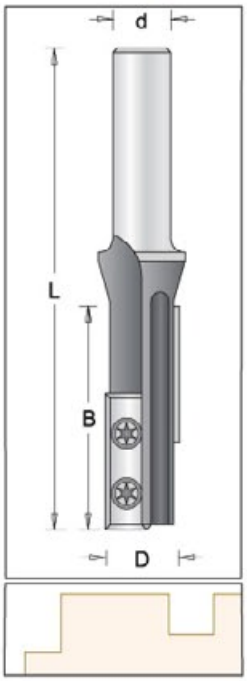


D	B	Kod	L	d
14	50.8	1260 330	109.5	14
	50.8	1260 339	109.5	12





Schodkowy frez prosty z ostrzem wymiennym





D	B	Kod	L	d
16	50	107 314 9 *	107	12
18	50	107 318 9	107	12
20	50	107 322 9	107	12
22	50	107 326 9	107	12

Części zamienne:


Płytka HM *
310 793 0
30x9x1.5

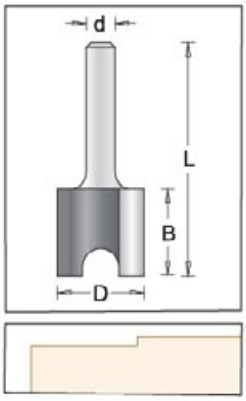

Wkręt torx *
193 354 8
M3.5x4.8


Płytka HM
310 723 0
30x12x1.5


Wkręt torx
193 148 2
M4xS6


Klucz torx
194 101 5
T15

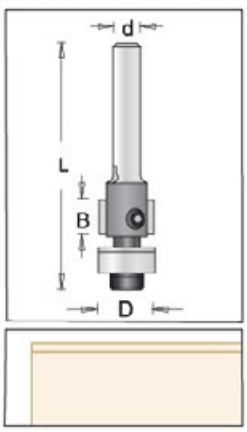
Frez oscylacyjny do zawiasów





D	B	Kod	L	d
12.7	19.1	1110 01 3	51	6
	19.1	1110 01 5	51	8
15.9	19.1	1110 04 3	51	6
	19.1	1110 04 5	51	8
19.1	19.1	1110 07 3	51	6
	19.1	1110 07 5	51	8
25.4	19.1	1110 10 3	51	6
	19.1	1110 10 5	51	8
31.8	19.1	1110 12 9	58	12
	31.8	1110 13 9	73	12

Frez prosty przycinający





D	B	Kod	L	d
12.7	8.5	1019 10 3	57	6

Części zamienne:

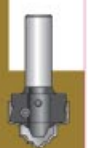

Płytka HM
#310 150 1
8.5x5.5x1.1


Łożysko
#191 007 0
4.7x12.7x5


Wkręt torx
#193 036 0
M3x5

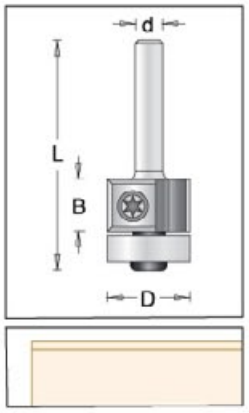

Wkręt torx
#193 033 0
M3x6


Klucz imbusowy
#194 102 0
S1.5

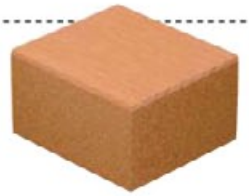




Frez prosty przycinający



D	B	Kod	L	d
19	12	1019 40 3 *	52	6
	12	1019 40 5 *	57	8
	30	1019 44 3	70	6
	30	1019 44 5	72	8
	30	1019 44 9	78	12
	50	1019 47 9 **	99	12



Części zamienne:



Płytka HM * #310 121 2 12x12x1.5



Płytka HM #310 123 0 30x12x1.5



Płytka HM ** #310 126 0 50x12x1.7



Łożysko #191 012 0 6x19x6

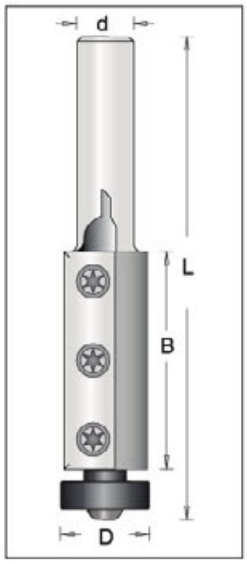


Wkręt torx #193 148 2 M - 4x5.6



Klucz torx #194 102 0 T - 15

Frez przycinający prosty



D	B	Kod	L	d
19.0	50.0	1019 47 9	109.7	12

Części zamienne:



Płytka HM #310 126 0 50x12x1.5



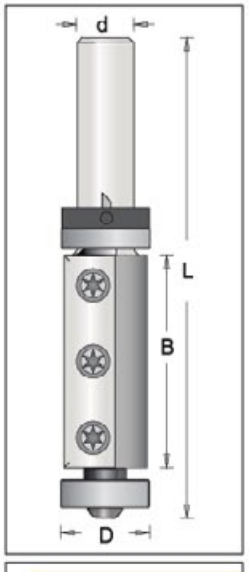
Łożysko #191 012 0 19x6x6



Wkręt torx #193 148 2 M4x5.6



Klucz torx #194 101 5 T15



D	B	Kod	L	d
19.0	50.0	1019 57 9	109.7	12

Części zamienne:



Płytka HM #310 126 0 50x12x1.5



Łożysko #191 014 0 1/4x3/4x9/32



Łożysko #191 020 0 1/2x3/4x5/32



Wkręt torx #193 148 2 M4x5.6



Klucz torx #194 101 5 T15

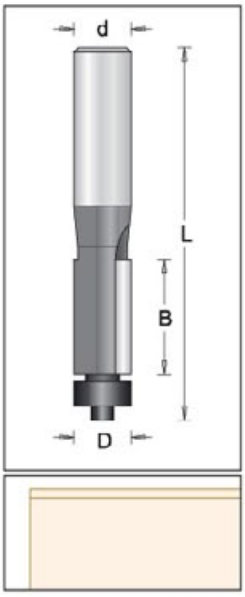




NOVA Routing - Portable Machines

Frez prosty przycinający





D	B	Kod	L. zębów	L	d	
9.5	12.7	1010 01 3	2	56	6.0	A
	12.7	1010 01 5	2	59	8.0	A
	25.4	1010 04 3	2	69	6.0	A
	25.4	1010 04 5	2	72	8.0	A
12.7	12.7	1010 07 3	2	56	6.0	B
	12.7	1010 07 5	2	60	8.0	B
	25.4	1010 10 3	2	67	6.0	B
	25.4	1010 10 5	2	71	8.0	B
	25.4	1010 10 6	2	74	9.5	B
	12.7	1010 07 9	2	71	12.0	B
	25.4	1010 10 9	2	84	12.0	B
	38.1	1010 16 9	2	99	12.0	B
	51.0	1010 19 9	2	108	12.0	B
19.1	25.4	1014 17 9	2	83	12.0	C
12.7	12.7	1010 22 3	3	56	6.0	B
	12.7	1010 22 5	3	59	8.0	B
	25.4	1010 25 3	3	67	6.0	B
	25.4	1010 25 5	3	70	8.0	B
	12.7	1010 22 9	3	71	12.0	B
	25.4	1010 25 9	3	84	12.0	B
	38.1	1010 28 9	3	100	12.0	B

Części zamienne:



A.Łożysko
#191 004 0
4.7x9.5x3.1



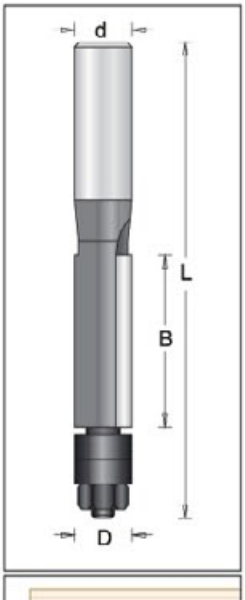
B.Łożysko
#191 007 0
4.7x12.7x5



C.Łożysko
#191 014 0
6.3x19x7

Frez przycinający prosty - z podwójnym łożyskiem





D	B	Kod	L. zębów	L	d
12.7	38.1	1010 17 9	2	103.5	12
	51.0	1010 20 9	2	116.7	12
	38.1	1010 30 9	3	103.5	12

Części zamienne:



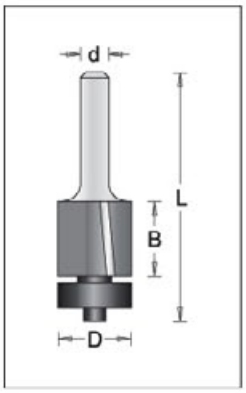
Łożysko
#191 007 0
4.7x12.7x5



Nakrętka
#198 001 0
NC3/16

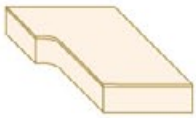


Frez przycinający - z płytką ukośną





D	B	Kod		L	d	
16.0	16.0	1010 13 3	Cięcie dolne	56.0	6	A
	16.0	1010 13 5	Cięcie dolne	60.0	8	B
19.1	16.0	1010 15 3	Cięcie dolne	61.0	6	B
	16.0	1010 15 5	Cięcie dolne	64.0	8	B
	25.4	1010 18 3	Cięcie dolne	72.0	6	B
	25.4	1010 18 5	Cięcie dolne	75.0	8	B
19.1	38.1	1013 01 9	Cięcie górne	98.4	12	B
	50.8	1013 02 9	Cięcie górne	108.0	12	B



Części zamienne:

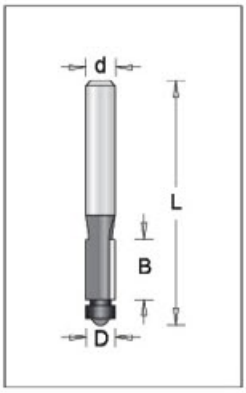


A.Łożysko
#191 010 0
5x16x5



B.Łożysko
#191 014 0
6.7x19x2.4

Frez prosty przycinający





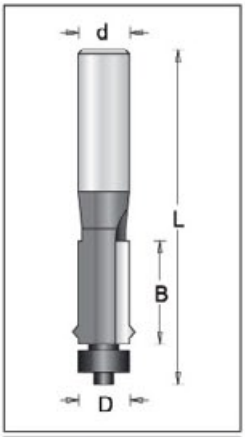
D	B	Kod	Ostrza	L	d
6.35	12.7	1011 01 3	2	52	6
	25.4	1011 00 3	2	65	6

Części zamienne:



Łożysko
#191 002 0
3x6.3x2.8

Frez prosty przycinający z nacięciem "V"



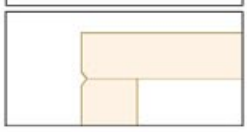


D	B	Kod	Ostrza	L	d
12.7	25.4	1010 11 3	2	67	6
	25.4	1010 11 9	2	83	12

Części zamienne:



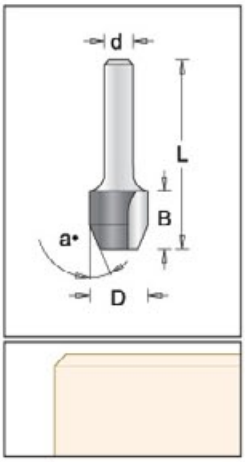
Łożysko
#191 007 0
4.7x12.7x5







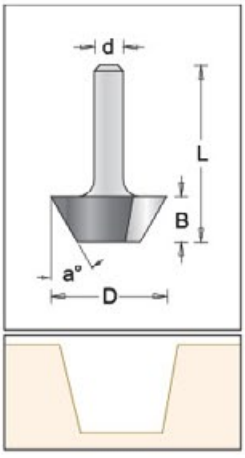
Frez przycinający - do cięcia prostego i ukośnego





D	a	B	Kod	L	d
8.7	23°	12.7	1100 19 3	41.3	6
9.5	23°	12.7	1100 16 3	41.3	6
12.7	23°	12.7	1100 01 3	41.3	6
	30°	12.7	1100 04 3	41.3	6
	30°	12.7	1100 04 5	44.3	8

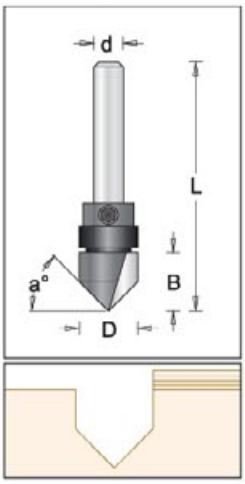
Frez z płytką ukośną

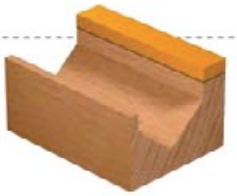




D	a	B	Kod	L	d
12.7	15°	12.7	1030 09 3	51.0	6
22.2	23°	10.0	1030 01 3	38.5	6
	23°	10.0	1030 01 5	42.5	8
25.4	30°	10.0	1030 04 3	38.5	6
	30°	10.0	1030 04 5	42.0	8
24.2	45°	6.3	1030 06 5	38.5	8
34.2	45°	10.0	1030 07 3	38.5	6
	45°	10.0	1030 07 5	42.0	8

Frez do nacięć "V"





D	a	B	Kod	L	d
12.7	45°	12.7	1052 10 3	52	6

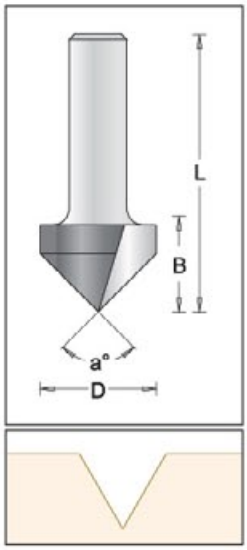
Części zamienne:



Łożysko
#191 003 0
12.7x3.6x4.7



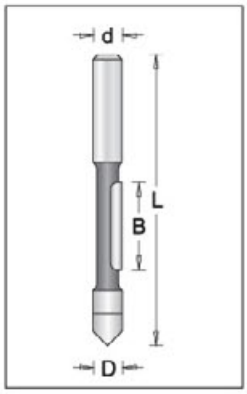
Frez do nacięć "V"





D	a	B	Kod	L	d
9.5	90°	11.0	1050 01 3	42.0	6
	90°	11.0	1050 01 5	45.0	8
12.7	60°	16.0	1050 04 3	44.5	6
	60°	16.0	1050 04 5	47.5	8
	70°	16.0	1050 07 3	44.5	6
	70°	16.0	1050 07 5	47.5	8
	90°	12.7	1050 10 3	41.5	6
	90°	12.7	1050 10 5	44.0	8
16.0	90°	12.7	1050 13 3	41.3	6
	90°	12.7	1050 13 5	45.0	8
19.1	90°	16.0	1050 16 3	45.0	6
	90°	16.0	1050 16 5	48.0	8
22.2	90°	19.1	1050 17 3	48.0	6
	90°	19.1	1050 17 5	52.0	6
25.4	90°	19.1	1050 19 3	48.0	6
	90°	19.1	1050 19 5	51.0	8
9.5	90°	11.0	1050 01 9	52.0	12
12.7	90°	12.7	1050 10 9	55.0	12
16.0	90°	12.7	1050 13 9	51.0	12
19.1	90°	16.0	1050 16 9	54.0	12
25.4	90°	19.1	1050 19 9	57.0	12
31.8	90°	25.4	1050 22 9	63.5	12
38.1	90°	31.8	1050 25 9	70.0	12
51.0	90°	44.5	1050 31 9	83.0	12

Frez boczny z pilotem centrującym





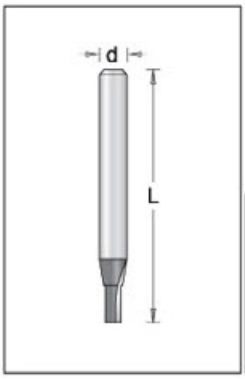
D	B	Kod	L	d
6.3	19.1	1150 01 3 *	63.5	6.0
	19.1	1150 01 5 *	63.5	8.0
9.5	25.4	1150 04 6 *	76.2	9.5
12.7	30.1	1150 07 9 *	88.9	12.0
6.3	19.1	1153 01 5 **	63.5	8.0
9.5	25.4	1153 04 6 **	76.2	9.5
12.7	30.1	1153 07 9 **	88.9	12.0

* z jednym ostrzem
** z dwoma ostrzami



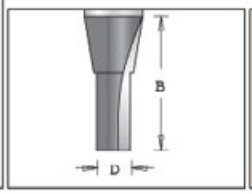
Frez prosty do uszczelek





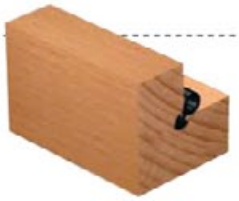
D	B	Kod	L	d
3	8	1078 02 3	55	6
	8	1078 02 5	48	8

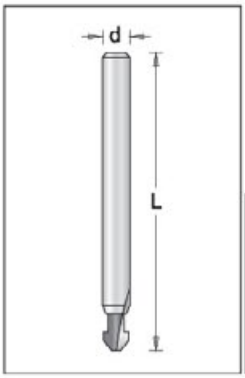
* Ostrze monolityczne HM





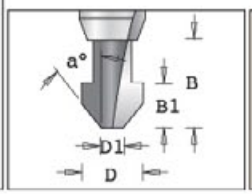
Frez profilujący do uszczelek





D	D1	Kod	B	B1	a	L□	d
5.5	2	1041 01 3	8	4	38°	65	6

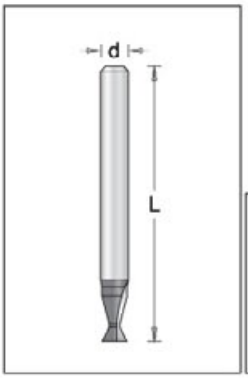
* Ostrze monolityczne HM





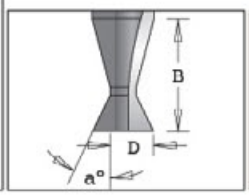


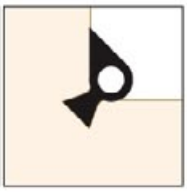
Frez do wczepów jaskółczych

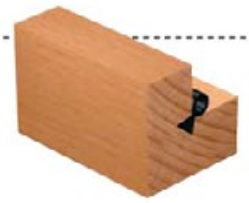


D	a	B	Kod	L	d
5.1	25°	8	1043 00 3	60	6

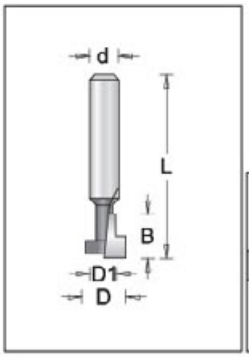
⚠ * Ostrze monolityczne HM







Frez do otworów na zamki - z jednym ostrzem



D	D1	B	Kod	L	d
9.7	5	9.5	1141 01 3	40.0	6
	5	9.5	1141 01 5	47.0	8
12.7	8	9.5	1141 03 3	38.1	6
	8	9.5	1141 03 5	38.1	8

