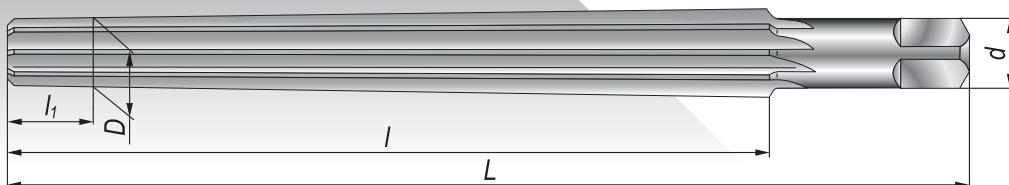


# ROZWIERTAKI; REAMERS



## ROZWIERTAKI; REAMERS



DIN  
9-A



DIN  
9-B



D	d	$l_1$	l	L	Z	DIN 9-A	DIN 9-B
3	4	5	58	80	5	●	-
4	5	5	68	93	5	●	●
5	6.3	5	73	100	5	●	●
6	8	5	105	135	6	●	●
7	8	5	105	135	6	●	●
8	10	5	145	180	7	●	●
10	12.5	5	175	215	7	●	●
12	14	10	210	255	7	●	●
13	17.2	10	220	265	7	●	○
16	18	10	230	280	9	●	●
20	22.4	10	250	310	9	●	●
25	28	15	300	370	9	●	●
30	31.5	15	320	400	9	○	○
40	40	15	340	430	11	○	○
50	50	15	360	460	11	○	○

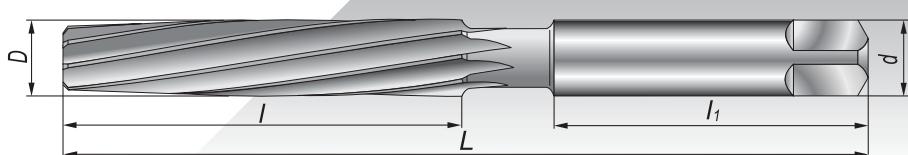
Przykład zamówienia; Example of order: Rozwiertak; Reamer DIN 9-A 10 HSS

Na specjalne zamówienie wykonujemy narzędzia o wymiarach innych niż zawarte w tabeli;  
For the special order we make tools of other dimensions than contained in table.

# DIN 206-A, B

ROZWIERTAKI; REAMERS

H7      HSS      DIN 10



DIN 206-A      0°

DIN 206-B      7°



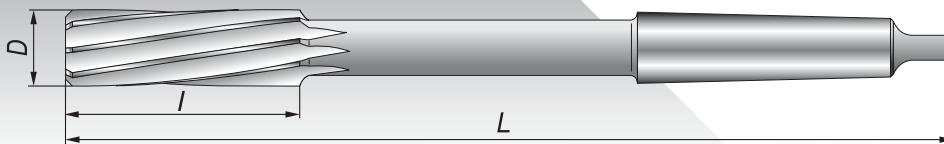
<b>D</b> [H7]	<b>d</b> [ $\varnothing$ ]	<b>l</b>	<b>l<sub>1</sub></b>	<b>L</b>	<b>Z</b>	<b>DIN 206-A</b>	<b>DIN 206-B</b>
3	3	31	23	62	6	●	●
3.5	3.5	35	26	71	6	●	●
4	4	38	28	76	6	●	●
4.5	4.5	41	30	81	6	●	●
5	5	44	32	87	6	●	●
5.5	5.5	47	32	93	6	●	●
6	6	47	32	93	6	●	●
6.5	6.5	50	36	100	6	●	●
7	7	54	39	107	6	●	●
7.5	7.5	54	39	107	6	○	●
8	8	58	37	115	6	●	●
8.5	8.5	58	37	115	6	○	●
9	9	62	42	124	6	●	●
10	10	66	47	133	6	●	●
11	11	71	51	142	8	●	●
12	12	76	56	152	8	●	●
13	13	76	56	152	8	●	●
14	14	81	58	163	8	●	●
15	15	81	58	163	8	●	●
16	16	87	60	175	8	●	●
17	17	87	60	175	8	●	●
18	18	93	67	188	8	●	●
19	19	93	69	188	10	●	●
20	20	100	74	201	10	●	●
21	21	100	74	201	10	●	●
22	22	107	78	215	10	●	●
23	23	107	78	215	10	○	●
24	24	115	86	231	10	●	●
25	25	115	86	231	10	●	●
26	26	115	86	231	10	●	●
27	27	124	88	247	10	○	●
28	28	124	88	247	10	●	●
30	30	124	88	247	10	●	●
32	32	133	99	265	12	○	○
34	34	142	104	284	12	○	○
35	35	142	104	284	12	●	●
36	36	142	104	284	12	○	○
38	38	152	113	305	12	○	○
40	40	152	113	305	12	●	●
42	42	152	113	305	12	○	○
44	44	163	120	326	12	○	○
45	45	163	120	326	12	○	○
50	50	174	127	347	12	○	○

Przykład zamówienia; Example of order: Rozwiertak; Reamer 206-A 10 H7 HSS



Na specjalne zamówienie wykonujemy narzędzia o wymiarach innych niż zawarte w tabeli;  
For the special order we make tools of other dimensions than contained in table.

## ROZWIERTAKI; REAMERS



H7

HSS

HSS-E

DIN-  
228-B

DIN  
208-A

0°

DIN  
208-B

10°



D <sub>[H7]</sub>	I	L	Nr stoż; MT	Z	DIN 208-A		DIN 208-B	
					HSS	HSS-E	HSS	HSS-E
5	23	133	1	6	●	○	●	○
6	26	138	1	6	●	○	●	●
7	31	150	1	6	●	○	●	○
8	33	156	1	6	●	○	●	○
9	36	162	1	6	●	○	●	○
10	38	168	1	6	●	○	●	●
11	41	175	1	8	●	○	●	○
12	44	182	1	8	●	○	●	●
13	44	182	1	8	●	○	●	○
14	47	189	1	8	●	○	●	●
15	50	204	2	8	●	○	●	○
16	52	210	2	8	●	○	●	●
17	54	214	2	8	●	○	●	○
18	56	219	2	8	●	○	●	○
19	58	223	2	10	●	○	●	○
20	60	228	2	10	●	○	●	●
21	62	232	2	10	●	○	●	○
22	64	237	2	10	●	○	●	●
23	66	241	2	10	●	○	●	○
24	68	268	3	10	●	○	●	○
25	68	268	3	10	●	○	●	●
26	70	273	3	10	●	○	●	○
27	71	277	3	10	●	○	●	○
28	71	277	3	10	●	○	●	●
29	71	281	3	10	●	○	●	●
30	73	281	3	10	●	○	●	○
31	75	285	3	12	●	○	●	○
32	77	317	4	12	●	○	●	○
33	77	317	4	12	●	○	●	○
34	78	321	4	12	●	○	●	○
35	78	321	4	12	●	○	●	○
36	79	325	4	12	●	○	●	○
37	79	325	4	12	○	○	○	○
38	81	329	4	12	●	○	●	○
39	81	329	4	12	●	○	○	○
40	81	329	4	12	●	○	●	○
42	82	333	4	12	●	○	○	○
44	83	336	4	12	●	○	○	○
45	83	336	4	12	●	○	●	○
48	86	344	4	12	●	○	○	○
50	86	344	4	12	●	○	●	○

Przykład zamówienia; Example of order: Rozwiertak; Reamer DIN 208-A 40 H7 HSS

Na specjalne zamówienie wykonujemy narzędzia o wymiarach innych niż zawarte w tabeli;  
For the special order we make tools of other dimensions than contained in table.

# DIN 212-A, B, C, D

ROZWIERTAKI; REAMERS



H7    HSS    HSS-E



DIN  
212-A/C    0°

DIN  
212-B/D    10°



Typ wyrobu; Type of product:

- A - rowki proste bez szyjki; straight flutes without neck (dla; for  $D < 3.75$ )
- B - rowki rubowe bez szyjki; helical flutes without neck (dla; for  $D > 3.75$ )
- C - rowki proste z szyjk; straight flutes with neck (dla; for  $D < 3.75$ )
- D - rowki rubowe z szyjk; helical flutes with neck (dla; for  $D > 3.75$ )

D [mm]	d [mm]	DIN 212-A, C				DIN 212-B, D			
		l	l <sub>1</sub>	L	Z	HSS	HSS-E	HSS	HSS-E
3	3	15	-	61	6	●	○	●	○
3.5	3.5	18	-	70	6	●	○	●	○
4	4	19	32	75	6	●	○	●	●
4.5	4.5	21	33	80	6	●	○	○	○
5	5	23	34	86	6	●	○	●	●
5.5	5.6	26	36	93	6	●	○	●	○
6	5.6	26	36	93	6	●	○	●	●
6.5	6.3	28	38	101	6	●	○	●	○
7	7.1	31	40	109	6	●	○	●	○
7.5	7.1	31	40	109	6	●	○	○	○
8	8	33	42	117	6	●	○	●	●
8.5	8	33	42	117	6	●	○	●	○
9	9	36	44	125	6	●	○	●	○
10	10	38	46	133	6	●	○	●	●
11	10	41	46	142	8	●	○	●	○
12	10	44	46	151	8	●	○	●	●
13	10	44	46	151	8	●	○	●	○
14	12.5	47	50	160	8	●	○	●	●
15	12.5	50	50	162	8	●	○	●	○
16	12.5	52	50	170	8	●	○	●	●
17	14	54	52	175	8	●	○	○	○
18	14	56	52	182	8	●	○	●	●
19	16	58	58	189	10	●	○	●	○
20	16	60	58	195	10	●	○	●	●
21	18	60	58	215	10	●	○	○	○
22	18	60	63	225	10	●	○	○	○
23	18	60	63	230	10	●	○	○	○
24	20	60	63	240	10	●	○	○	○
25	20	60	64	245	10	●	○	○	○

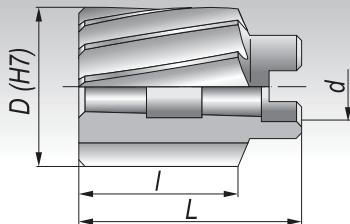
Przykład zamówienia; Example of order: Rozwieratak; Reamer DIN 212-C 10 H7 HSS



Na specjalne zamówienie wykonujemy narzędzia o wymiarach innych niż zawarte w tabeli;  
For the special order we make tools of other dimensions than contained in table.

Rozwieraki maszynowe wykańczaki trzpieniowe z chwytem walcowym;  
Finishing chucking reamers with straight shank

## ROZWIERTAKI; REAMERS



H7

HSS

DIN138

DIN  
219-A

0°

DIN  
219-B

10°



D <sub>[H7]</sub>	d	l	L	Z	DIN 219-A	DIN 219-B
30	13	32	45	10	●	●
32	16	36	50	12	●	●
34	16	36	50	12	●	●
35	16	36	50	12	●	●
36	19	40	56	12	●	●
38	19	40	56	12	○	●
40	19	40	56	12	●	●
42	19	40	56	12	●	●
45	22	45	63	12	●	●
46	22	45	63	12	○	●
48	22	45	63	12	●	●
50	22	45	63	12	●	●
52	27	50	71	12	○	●
55	27	50	71	12	○	●
58	27	50	71	12	○	○
60	27	50	71	12	○	●
62	32	56	80	14	○	●
65	32	56	80	14	○	●
70	32	56	80	14	○	●
72	40	63	90	14	○	●
75	40	63	90	14	○	●
80	40	63	90	14	○	●
85	40	63	90	14	○	●
90	50	71	100	16	○	○
95	50	71	100	16	○	○
100	50	71	100	16	○	○

Przykład zamówienia; Example of order: Rozwiertak; Reamer DIN 219-A 40 H7 HSS



Na specjalne zamówienie wykonujemy narzędzia o wymiarach innych niż zawarte w tabeli;  
For the special order we make tools of other dimensions than contained in table.

PN-89/M  
58900

h8

HSS

DIN  
228-B

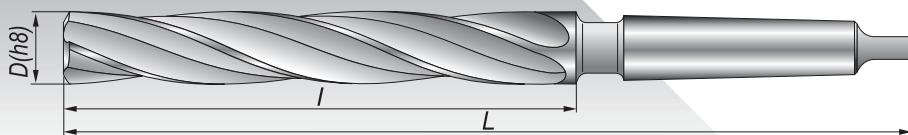
D <sub>[h8]</sub>	I	L	Nr stoż; MT	NRTa
7.8	25	128	1	○
8.8	29	140	1	○
9.8	29	140	1	○
10.75	33	153	1	○
11.75	33	153	1	○
12.75	33	153	1	○
13.75	38	169	1	○
14.75	38	184	2	○
15.75	38	184	2	●
16.75	38	184	2	●
17.75	44	203	2	●
18.7	44	203	2	●
19.7	44	203	2	●
20.7	44	203	2	○
21.7	51	225	2	●
22.7	51	225	2	○
23.7	51	244	3	○
24.7	51	244	3	○
25.7	51	244	3	○
26.7	60	271	3	○
27.7	60	271	3	●
29.7	60	271	3	○
31.6	60	296	3	○
33.6	69	326	4	○
34.6	69	326	4	○
35.6	69	326	4	○

Przykład zamówienia; Example of order: Rozwieratak; Reamer NRTa 19.7



Na specjalne zamówienie wykonujemy narzędzia o wymiarach innych niż zawarte w tabeli;  
 For the special order we make tools of other dimensions than contained in table.

## ROZWIERTAKI; REAMERS

DIN  
346

h8

HSS

DIN  
228-B

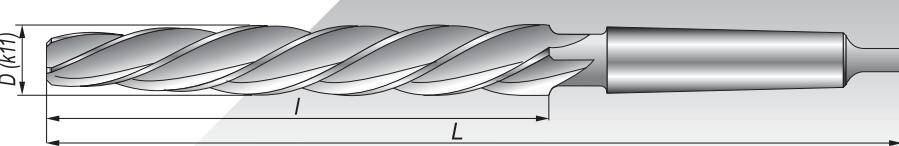
D [h8]	l	L	Nr stoż; MT	NRTb
7.8	75	156	1	○
8.8	81	162	1	○
9.8	87	168	1	○
10.75	94	175	1	●
11.75	94	175	1	●
12.75	101	182	1	○
13.75	108	189	1	○
14.75	114	212	2	○
15.75	120	218	2	●
16.75	125	223	2	○
17.75	130	228	2	●
18.7	135	233	2	●
19.7	140	238	2	●
20.7	145	243	2	●
21.7	150	243	2	●
22.7	155	255	2	○
23.7	160	281	3	○
24.7	160	281	3	○
25.7	165	286	3	○
26.7	170	291	3	○
27.7	170	291	3	○
29.7	175	296	3	○
31.6	185	306	3	○
33.6	190	339	4	○
34.6	190	339	4	○
35.6	195	344	4	○

Przykład zamówienia; Example of order: Rozwiertak; Reamer NRTb 19.7

Na specjalne zamówienie wykonujemy narzędzia o wymiarach innych niż zawarte w tabeli;  
For the special order we make tools of other dimensions than contained in table.



DIN  
311      k11      HSS      25°      DIN  
228-B



D [k11]	I	L	Z	Nr stoż; MT	DIN 311
10	95	171	4	1	•
11	100	176	4	1	•
12	105	199	5	2	•
13	105	199	5	2	•
14	115	209	5	2	•
15	125	219	5	2	•
16	135	229	5	2	•
17	135	251	5	3	•
18	145	261	5	3	•
19	145	261	5	3	•
20	155	271	5	3	•
21	155	271	5	3	•
22	165	281	5	3	•
23	165	281	5	3	•
24	180	296	5	3	•
25	180	296	5	3	•
26	180	296	5	3	•
27	195	311	5	3	•
28	195	311	5	3	•
30	195	311	5	3	•
31	210	326	5	3	•
32	210	354	5	4	•
34	220	364	5	4	•

Przykład zamówienia; Example of order: Rozwieratak; Reamer DIN 311 21 HSS

Na specjalne zamówienie wykonujemy narzędzia o wymiarach innych niż zawarte w tabeli;  
For the special order we make tools of other dimensions than contained in table.