



Alésoirs machine

HSS-E

H7

DIN 212

Cyl



A

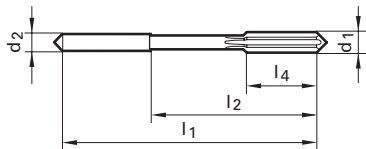


B



≤ Ø 3,75 mm centre extérieur aux 2 extrémités
> Ø 3,75 mm centre intérieur aux 2 extrémités

N° d'article	88302	88304
P (N/mm ²)	1000	1000
M	○	○
K	●	●
N	●	●
S	○	○
H (HRC)		
Version	○	○
Codification remise	105	105



N° de code	d1 mm	d2 h6 mm	l1 mm	l2 mm	l4 mm	Z	Prix unitaire en €	
1,000	1,000	1,000	34,00	15,00	5,50	3	28,50	26,00
1,200	1,200	1,200	38,00	16,50	7,50	3	29,00	27,50
1,300	1,300	1,300	38,00	16,50	7,50	3		35,00
1,400	1,400	1,400	40,00	18,00	8,00	3		28,50
1,500	1,500	1,500	40,00	18,00	8,00	3	23,00	21,50
1,600	1,600	1,600	43,00	20,00	9,00	3	28,00	26,50
1,800	1,800	1,800	46,00	22,00	10,00	4	32,00	30,50
1,900	1,900	1,900	46,00	22,00	10,00	4		30,50
2,000	2,000	2,000	49,00	24,00	11,00	4	22,50	19,40
2,200	2,200	2,200	53,00	25,00	12,00	4	31,00	27,50
2,300	2,300	2,300	53,00	25,00	12,00	4		30,50
2,500	2,500	2,500	57,00	29,00	14,00	4	22,00	20,50
2,700	2,700	2,800	61,00	33,00	15,00	6		29,00
2,800	2,800	2,800	61,00	33,00	15,00	6		30,50
2,900	2,900	3,000	61,00	33,00	15,00	6		30,50
3,000	3,000	3,000	61,00	33,00	15,00	6	18,20	17,60
3,200	3,200	3,200	65,00	37,00	16,00	6	29,00	28,50
3,500	3,500	3,500	70,00	42,00	18,00	6	26,00	22,00
3,700	3,700	3,500	70,00	42,00	18,00	6		32,00
5,500	5,500	5,600	93,00	57,00	26,00	6	30,50	

Alésoirs machine HSS-E

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Alésoirs machine

Alésoirs machine HSS-E

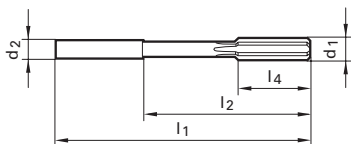
H7

 DIN
212-2

Cyl



$\leq \varnothing 3,75$ mm centre extérieur aux 2 extrémités
 $> \varnothing 3,75$ mm centre intérieur aux 2 extrémités



N° de code	d1 mm	d2 h6 mm	l1 mm	l2 mm	l4 mm	Z
3,800	3,800	4,000	75,00	47,00	19,00	6
4,000	4,000	4,000	75,00	47,00	19,00	6
4,400	4,400	4,500	80,00	52,00	21,00	6
4,500	4,500	4,500	80,00	52,00	21,00	6
4,700	4,700	4,500	80,00	52,00	21,00	6
4,900	4,900	5,000	86,00	58,00	23,00	6
5,000	5,000	5,000	86,00	58,00	23,00	6
5,100	5,100	5,000	86,00	58,00	23,00	6
5,500	5,500	5,600	93,00	57,00	26,00	6
6,000	6,000	5,600	93,00	57,00	26,00	6
6,100	6,100	6,300	101,00	65,00	28,00	6
6,200	6,200	6,300	101,00	65,00	28,00	6
6,500	6,500	6,300	101,00	65,00	28,00	6
6,900	6,900	7,100	109,00	73,00	31,00	6
7,000	7,000	7,100	109,00	73,00	31,00	6
7,100	7,100	7,100	109,00	73,00	31,00	6
7,200	7,200	7,100	109,00	73,00	31,00	6
7,400	7,400	7,100	109,00	73,00	31,00	6
7,500	7,500	7,100	109,00	73,00	31,00	6
8,000	8,000	8,000	117,00	81,00	33,00	6
8,100	8,100	8,000	117,00	81,00	33,00	6
8,300	8,300	8,000	117,00	81,00	33,00	6
8,500	8,500	8,000	117,00	81,00	33,00	6
9,000	9,000	9,000	125,00	85,00	36,00	6
9,200	9,200	9,000	125,00	85,00	36,00	6
9,400	9,400	9,000	125,00	85,00	36,00	6
9,500	9,500	9,000	125,00	85,00	36,00	6
9,800	9,800	10,000	133,00	93,00	38,00	6
9,900	9,900	10,000	133,00	93,00	38,00	6
10,000	10,000	10,000	133,00	93,00	38,00	6

HSS-E



A



B



N° d'article.

88305

88306

 P (N/mm²)

1000

1000

M

○

○

K

●

●

N

●

●

S

○

○

H (HRC)

Version

○

○

Codification remise

105

105



Prix unitaire en €

							Prix unitaire en €	
								30,50
							20,00	19,40
								28,50
							26,50	22,00
								31,00
								31,00
							21,50	20,00
								31,00
							30,50	26,00
							22,00	21,50
								32,00
								31,00
								27,00
								31,00
							29,50	25,50
								35,00
								38,50
								35,00
								33,50
							27,50	26,50
								42,00
							37,00	32,50
								43,50
							44,00	41,00
								43,50
								43,50
							32,50	31,00

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Alésoirs machine

HSS-E

H7

DIN 212-2

Cyl



A

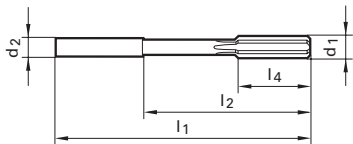


B



≤ Ø 3,75 mm centre extérieur aux 2 extrémités
> Ø 3,75 mm centre intérieur aux 2 extrémités

N° d'article	88305	88306
P (N/mm ²)	1000	1000
M	○	○
K	●	●
N	●	●
S	○	○
H (HRC)		
Version	○	○
Codification remise	105	105



N° de code	d1 mm	d2 h6 mm	l1 mm	l2 mm	l4 mm	Z	Prix unitaire en €	
							88305	88306
10,100	10,100	10,000	133,00	93,00	38,00	6		46,50
10,500	10,500	10,000	133,00	93,00	38,00	6	54,00	
10,700	10,700	10,000	142,00	102,00	41,00	6		61,00
11,000	11,000	10,000	142,00	102,00	41,00	6	53,00	46,50
11,500	11,500	10,000	142,00	102,00	41,00	6	67,00	58,00
12,000	12,000	10,000	151,00	111,00	44,00	6	47,00	45,50
13,000	13,000	10,000	151,00	111,00	44,00	6	56,00	52,00
14,000	14,000	12,500	160,00	115,00	47,00	8	57,00	53,00
15,000	15,000	12,500	162,00	117,00	50,00	8	59,00	54,00
16,000	16,000	12,500	170,00	125,00	52,00	8	63,00	56,00
17,000	17,000	14,000	175,00	130,00	54,00	8	84,00	71,00
18,000	18,000	14,000	182,00	137,00	56,00	8	84,00	69,00
19,000	19,000	16,000	189,00	141,00	58,00	8	100,00	85,00
20,000	20,000	16,000	195,00	147,00	60,00	8	83,00	78,00

Alésoirs machine HSS-E

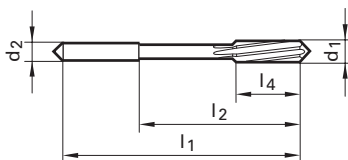
○ poli

Alésoirs machine

Alésoirs machine HSS-E



$\leq \varnothing 3,75$ mm centre extérieur aux 2 extrémités
 $> \varnothing 3,75$ mm centre intérieur aux 2 extrémités
 Ø ascendant par 0,01 mm
 Tolérance:
 $\varnothing 0,95 - 5,50$ mm: 0,000/+0,004
 $\varnothing 5,51 - 12,05$ mm: 0,000/+0,005



de d1	à d1	d2 h9	l1	l2	l4	Z
mm	mm	mm	mm	mm	mm	
0,950	1,060	1,000	34,000	15,000	5,500	3
1,070	1,180	1,100	36,000	15,500	6,500	3
1,190	1,320	1,200	38,000	16,500	7,500	3
1,330	1,390	1,400	40,000	18,000	8,000	3
1,400	1,410	1,400	40,000	18,000	8,000	3
1,420	1,490	1,500	40,000	18,000	8,000	3
1,500	1,500	1,500	40,000	18,000	8,000	3
1,510	1,700	1,600	43,000	20,000	9,000	3
1,710	1,900	1,800	46,000	22,000	10,000	4
1,910	1,990	2,000	49,000	24,000	11,000	4
2,000	2,090	2,000	49,000	24,000	11,000	4
2,100	2,120	2,000	49,000	24,000	11,000	4
2,130	2,360	2,200	53,000	25,000	12,000	4
2,370	2,490	2,500	57,000	29,000	14,000	4
2,500	2,590	2,500	57,000	29,000	14,000	4
2,600	2,650	2,500	57,000	29,000	14,000	4
2,660	2,800	2,800	61,000	33,000	15,000	6
2,810	2,990	3,000	61,000	33,000	15,000	6
3,000	3,000	3,000	61,000	33,000	15,000	6
3,010	3,090	3,200	65,000	37,000	16,000	6
3,100	3,350	3,200	65,000	37,000	16,000	6
3,360	3,490	3,500	70,000	42,000	18,000	6
3,500	3,590	3,500	70,000	42,000	18,000	6
3,600	3,740	3,500	70,000	42,000	18,000	6
3,760	3,810	4,000	75,000	47,000	19,000	6
3,820	4,200	4,000	75,000	47,000	19,000	6
4,210	4,250	4,000	75,000	47,000	19,000	6
4,260	4,750	4,500	80,000	52,000	21,000	6
4,760	5,200	5,000	86,000	58,000	23,000	6
5,210	5,300	5,000	86,000	58,000	23,000	6

HSS-E



+0,004
+0,005

N° d'article	88311
P (N/mm ²)	1000
M	○
K	●
N	●
S	○
H (HRC)	
Version	○
Codification remise	105



Prix unitaire en €

29,00
29,00
29,00
29,00
27,00
27,00
25,50
25,50
25,50
25,50
23,50
27,50
27,50
27,50
21,50
25,50
25,50
25,50
19,00
19,00
24,50
24,50
21,50
27,00
22,00
25,50
25,50
22,50
24,50

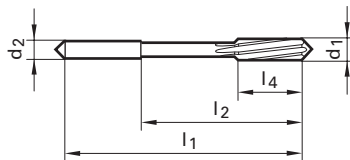
○ poli



Alésoirs machine



$\leq \varnothing 3,75$ mm centre extérieur aux 2 extrémités
 $> \varnothing 3,75$ mm centre intérieur aux 2 extrémités
 \varnothing ascendant par 0,01 mm
 Tolérance:
 $\varnothing 0,95 - 5,50$ mm: 0,000/+0,004
 $\varnothing 5,51 - 12,05$ mm: 0,000/+0,005



de d1 mm	à d1 mm	d2 h9 mm	l1 mm	l2 mm	l4 mm	Z
5,310	6,000	5,600	93,000	57,000	26,000	6
6,010	6,110	6,300	101,000	65,000	28,000	6
6,120	6,700	6,300	101,000	65,000	28,000	6
6,710	7,500	7,100	109,000	73,000	31,000	6
7,510	8,200	8,000	117,000	81,000	33,000	6
8,210	8,500	8,000	117,000	81,000	33,000	6
8,510	9,500	9,000	125,000	85,000	36,000	6
9,990	10,000	10,000	133,000	93,000	38,000	6
10,210	10,600	10,000	133,000	93,000	38,000	6
10,610	11,200	10,000	142,000	102,000	41,000	6
11,210	11,800	10,000	142,000	102,000	41,000	6
11,810	12,000	10,000	151,000	111,000	44,000	6
12,010	12,050	10,000	151,000	74,500	44,000	6

HSS-E



+0,004
+0,005

N° d'article	88311
P (N/mm²)	1000
M	○
K	●
N	●
S	○
H (HRC)	
Version	○
Codification remise	105



Prix unitaire en €

24,50
24,50
27,00
27,00
27,00
33,50
33,50
33,50
42,50
42,50
49,00
49,00
49,00

Alésoirs machine HSS-E

○ poli

Alésoirs machine

H7

DIN 208



HSS-E



A

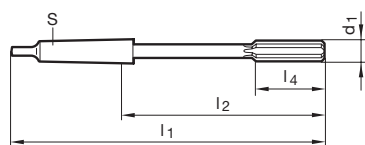


B



Ø 3,00 mm pointe de centrage côté coupe,
centre intérieur côté queue
> Ø 3,00 mm centre intérieur aux 2 extrémités
≤ Ø 4,00 mm selon norme usine

N° d'article	88307	88308
P (N/mm ²)	1000	1000
M	○	○
K	●	●
N	●	●
S	○	○
H (HRC)		
Version	○	○
Codification remise	105	105



N° de code	d1 mm	S	l1 mm	l2 mm	l4 mm	Z	Prix unitaire en €	
3,000	3,000	1	115,00	53,00	15,00	6	64,00	59,00
4,000	4,000	1	125,00	63,00	19,00	6	62,00	52,00
5,000	5,000	1	133,00	71,00	23,00	6	54,00	52,00
5,100	5,100	1	133,00	71,00	23,00	6	69,00	
5,500	5,500	1	138,00	76,00	26,00	6	69,00	
6,000	6,000	1	138,00	76,00	26,00	6	54,00	50,00
6,100	6,100	1	144,00	82,00	28,00	6	68,00	
6,200	6,200	1	144,00	82,00	28,00	6	68,00	
6,500	6,500	1	144,00	82,00	28,00	6	68,00	
7,000	7,000	1	150,00	88,00	31,00	6		56,00
7,500	7,500	1	150,00	88,00	31,00	6	68,00	
8,000	8,000	1	156,00	94,00	33,00	6	55,00	53,00
8,500	8,500	1	156,00	94,00	33,00	6	68,00	
9,000	9,000	1	162,00	100,00	36,00	6	74,00	63,00
9,500	9,500	1	162,00	100,00	36,00	6	79,00	
9,800	9,800	1	168,00	106,00	38,00	6	69,00	
10,000	10,000	1	168,00	106,00	38,00	6	48,50	45,00
10,100	10,100	1	168,00	106,00	38,00	6	79,00	
11,000	11,000	1	175,00	113,00	41,00	6	62,00	52,00
12,000	12,000	1	182,00	120,00	44,00	6	52,00	49,00
13,000	13,000	1	182,00	120,00	44,00	6	61,00	52,00
14,000	14,000	1	189,00	127,00	47,00	8	56,00	52,00
15,000	15,000	2	204,00	129,00	50,00	8	68,00	63,00
15,700	15,700	2	210,00	135,00	52,00	8	94,00	
16,000	16,000	2	210,00	135,00	52,00	8	70,00	63,00
17,000	17,000	2	214,00	139,00	54,00	8	75,00	69,00
18,000	18,000	2	219,00	144,00	56,00	8	78,00	72,00
19,000	19,000	2	223,00	148,00	58,00	8	92,00	76,00
19,500	19,500	2	228,00	153,00	60,00	8	110,00	
20,000	20,000	2	228,00	153,00	60,00	8	83,00	76,00

○ poli

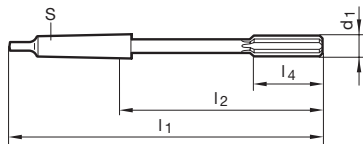
Alésoirs machine

H7

DIN
208



Ø 3,00 mm pointe de centrage côté coupe,
centre intérieur côté queue
> Ø 3,00 mm centre intérieur aux 2 extrémités
≤ Ø 4,00 mm selon norme usine



N° de code	d1 mm	S	l1 mm	l2 mm	l4 mm	Z
21,000	21,000	2	232,00	157,00	62,00	8
22,000	22,000	2	237,00	162,00	64,00	8
23,000	23,000	2	241,00	166,00	66,00	8
24,000	24,000	3	268,00	174,00	68,00	8
25,000	25,000	3	268,00	174,00	68,00	8
26,000	26,000	3	273,00	179,00	70,00	8
27,000	27,000	3	277,00	183,00	71,00	10
28,000	28,000	3	277,00	183,00	71,00	10
29,000	29,000	3	281,00	187,00	73,00	10
30,000	30,000	3	281,00	187,00	73,00	10
31,000	31,000	3	285,00	191,00	75,00	10
32,000	32,000	4	317,00	199,50	77,00	10
33,000	33,000	4	317,00	199,50	77,00	10
34,000	34,000	4	321,00	203,50	78,00	10
35,000	35,000	4	321,00	203,50	78,00	10
36,000	36,000	4	325,00	207,50	79,00	10
38,000	38,000	4	329,00	211,50	81,00	10
40,000	40,000	4	329,00	211,50	81,00	10
42,000	42,000	4	333,00	215,50	82,00	12
44,000	44,000	4	336,00	218,50	83,00	12
45,000	45,000	4	336,00	218,50	83,00	12
46,000	46,000	4	340,00	222,50	84,00	12
48,000	48,000	4	344,00	226,50	86,00	12
50,000	50,000	4	344,00	226,50	86,00	12

HSS-E



A



B



N° d'article	88307	88308
P (N/mm ²)	1000	1000
M	○	○
K	●	●
N	●	●
S	○	○
H (HRC)		
Version	○	○
Codification remise	105	105



Prix unitaire en €

92,00	85,00
88,00	85,00
105,00	99,00
107,00	100,00
107,00	104,00
122,00	111,00
137,00	124,00
137,00	122,00
	146,00
138,00	127,00
200,00	175,00
185,00	165,00
	228,00
226,00	187,00
204,00	187,00
244,00	204,00
268,00	224,00
244,00	224,00
	260,00
	306,00
	312,00
	366,00
	386,00
	368,00