

PROGRAMMA ALESATORI

AL 206	ALESATORE A MANO CON TAGLIENTI ELICOIDALI SINISTRI, DIN 206 B	A-156
AL 212	ALESATORE A MACCHINA, PROGRESSIONE DECIMALE SINISTRI, DIN 212, HSS-E	A-157
ALM 212	ALESATORE A MACCHINA DIN 212/B, MGCo	A-161

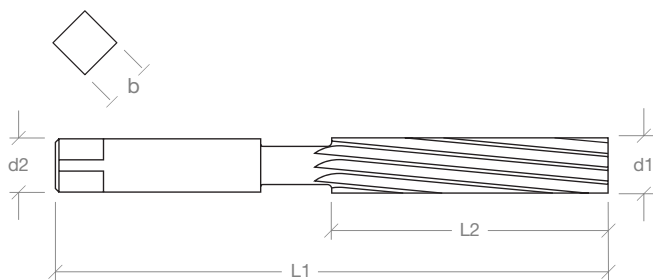
ALESATORE A MANO CODOLO CILINDRICO

DIN
206/B

6°
SX

HSS

H7



Codice articolo	d1 h7 mm	d2 h9 mm	L1 mm	L2 mm	Z	Prezzo cad. €
AL 206 010	1,0	1,0	40,0	15,0	4,00	26,50
AL 206 015	1,5	1,5	41,0	20,0	4,00	25,50
AL 206 020	2,0	2,0	50,0	25,0	4,00	23,50
AL 206 025	2,5	2,5	58,0	29,0	4,00	21,50
AL 206 030	3,0	3,0	62,0	31,0	4,00	24,00
AL 206 035	3,5	3,5	71,0	35,0	6,00	27,50
AL 206 040	4,0	4,0	76,0	38,0	6,00	24,00
AL 206 045	4,5	4,5	81,0	41,0	6,00	27,50
AL 206 050	5,0	5,0	87,0	44,0	6,00	26,50
AL 206 055	5,5	5,5	93,0	47,0	6,00	30,50
AL 206 060	6,0	6,0	93,0	47,0	6,00	26,00
AL 206 070	7,0	7,0	107,0	54,0	6,00	28,50
AL 206 080	8,0	8,0	115,0	58,0	6,00	28,50
AL 206 090	9,0	9,0	124,0	62,0	6,00	30,50
AL 206 100	10,0	10,0	133,0	66,0	6,00	34,50
AL 206 110	11,0	11,0	142,0	71,0	6,00	39,50
AL 206 120	12,0	12,0	152,0	76,0	6,00	40,00
AL 206 130	13,0	13,0	152,0	76,0	6,00	57,00
AL 206 140	14,0	14,0	163,0	81,0	6,00	64,00
AL 206 150	15,0	15,0	163,0	81,0	6,00	68,00
AL 206 160	16,0	16,0	175,0	87,0	6,00	68,50
AL 206 170	17,0	17,0	175,0	87,0	6,00	73,00
AL 206 180	18,0	18,0	188,0	93,0	6,00	82,00
AL 206 190	19,0	19,0	188,0	93,0	6,00	88,00
AL 206 200	20,0	20,0	201,0	100,0	6,00	88,00
AL 206 220	22,0	22,0	215,0	107,0	6,00	95,50
AL 206 250	25,0	25,0	231,0	115,0	6,00	118,50

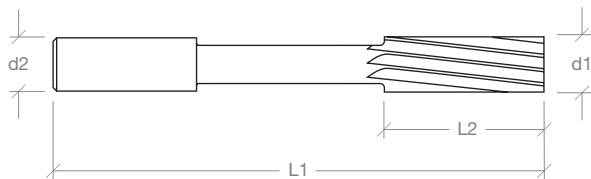
ALESATORE A MACCHINA

DIN
212/D



HSS-E

H7



Codice articolo	d1 h7 mm	d2 h9 mm	L1 mm	L2 mm	Z	Prezzo cad. €
AL 212 010	1,0	1,0	40,0	8,0	4,00	24,50
AL 212 015	1,5	2,0	40,0	8,0	3,00	25,00
AL 212 016	1,6	2,0	43,0	9,0	3,00	25,00
AL 212 017	1,7	2,0	43,0	9,0	3,00	25,00
AL 212 018	1,8	2,0	46,0	10,0	4,00	25,00
AL 212 019	1,9	2,0	46,0	10,0	4,00	25,00
AL 212 020	2,0	2,0	46,0	10,0	4,00	23,00
AL 212 021	2,1	2,0	49,0	11,0	4,00	23,00
AL 212 022	2,2	3,0	53,0	12,0	4,00	23,00
AL 212 023	2,3	3,0	53,0	12,0	4,00	23,00
AL 212 024	2,4	3,0	57,0	14,0	4,00	23,00
AL 212 025	2,5	3,0	57,0	14,0	4,00	23,00
AL 212 026	2,6	3,0	57,0	14,0	4,00	23,00
AL 212 027	2,7	3,0	61,0	15,0	6,00	23,00
AL 212 028	2,8	3,0	61,0	15,0	6,00	23,00
AL 212 029	2,9	3,0	61,0	15,0	6,00	23,00
AL 212 030	3,0	3,0	61,0	15,0	6,00	23,00
AL 212 031	3,1	4,0	65,0	16,0	6,00	23,00
AL 212 032	3,2	4,0	65,0	16,0	6,00	23,00
AL 212 033	3,3	4,0	65,0	16,0	6,00	23,00
AL 212 034	3,4	4,0	70,0	18,0	6,00	23,00
AL 212 035	3,5	4,0	70,0	18,0	6,00	23,00
AL 212 036	3,6	4,0	70,0	18,0	6,00	23,00
AL 212 037	3,7	4,0	70,0	18,0	6,00	23,00
AL 212 038	3,8	4,0	75,0	19,0	6,00	23,00
AL 212 039	3,9	4,0	75,0	19,0	6,00	23,00
AL 212 040	4,0	4,0	75,0	19,0	6,00	19,00

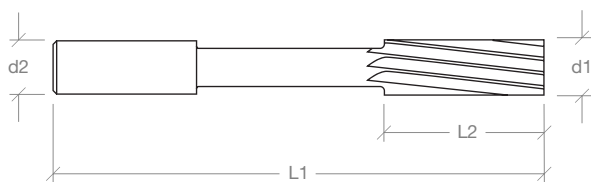
ALESATORE A MACCHINA

DIN
212/D



HSS-E

H7



Codice articolo	d1 h7 mm	d2 h9 mm	L1 mm	L2 mm	Z	Prezzo cad. €
AL 212 041	4,1	4,0	75,0	19,0	6,00	24,00
AL 212 042	4,2	4,0	75,0	19,0	6,00	24,00
AL 212 043	4,3	5,0	80,0	21,0	6,00	24,00
AL 212 044	4,4	5,0	80,0	21,0	6,00	24,00
AL 212 045	4,5	5,0	80,0	21,0	6,00	20,50
AL 212 046	4,6	5,0	86,0	21,0	6,00	26,50
AL 212 047	4,7	5,0	86,0	21,0	6,00	26,50
AL 212 048	4,8	5,0	86,0	23,0	6,00	26,50
AL 212 049	4,9	5,0	86,0	23,0	6,00	26,50
AL 212 050	5,0	5,0	86,0	23,0	6,00	20,00
AL 212 051	5,1	5,0	86,0	23,0	6,00	26,50
AL 212 052	5,2	5,0	86,0	23,0	6,00	26,50
AL 212 053	5,3	5,0	86,0	23,0	6,00	26,50
AL 212 054	5,4	6,0	93,0	26,0	6,00	26,50
AL 212 055	5,5	6,0	93,0	26,0	6,00	24,00
AL 212 056	5,6	6,0	93,0	26,0	6,00	26,50
AL 212 057	5,7	6,0	93,0	26,0	6,00	26,50
AL 212 058	5,8	6,0	93,0	26,0	6,00	26,50
AL 212 059	5,9	6,0	93,0	26,0	6,00	26,50
AL 212 060	6,0	6,0	93,0	26,0	6,00	21,00
AL 212 061	6,1	6,0	101,0	28,0	6,00	24,00
AL 212 062	6,2	6,0	101,0	28,0	6,00	24,00
AL 212 063	6,3	6,0	101,0	28,0	6,00	24,00
AL 212 064	6,4	6,0	101,0	28,0	6,00	24,00
AL 212 065	6,5	6,0	101,0	28,0	6,00	25,00
AL 212 066	6,6	6,0	101,0	28,0	6,00	26,50
AL 212 067	6,7	6,0	101,0	28,0	6,00	26,50

ALESATORE A MACCHINA

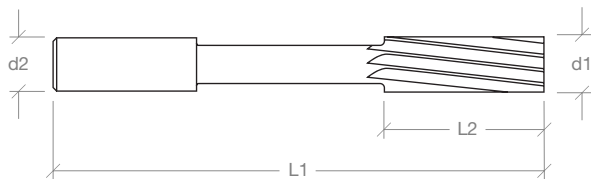
DIN
212/D



HSS-E

H7

PAG.
P-160



Codice articolo	d1 h7 mm	d2 h9 mm	L1 mm	L2 mm	Z	Prezzo cad. €
AL 212 068	6,8	8,0	109,0	31,0	6,00	26,50
AL 212 069	6,9	8,0	109,0	31,0	6,00	26,50
AL 212 070	7,0	8,0	109,0	31,0	6,00	25,00
AL 212 071	7,1	8,0	109,0	31,0	6,00	29,00
AL 212 072	7,2	8,0	109,0	31,0	6,00	29,00
AL 212 073	7,3	8,0	109,0	31,0	6,00	29,00
AL 212 074	7,4	8,0	109,0	31,0	6,00	29,00
AL 212 075	7,5	8,0	109,0	31,0	6,00	33,50
AL 212 076	7,6	8,0	117,0	33,0	6,00	30,50
AL 212 077	7,7	8,0	117,0	33,0	6,00	30,50
AL 212 078	7,8	8,0	117,0	33,0	6,00	30,50
AL 212 079	7,9	8,0	117,0	33,0	6,00	30,50
AL 212 080	8,0	8,0	117,0	33,0	6,00	26,00
AL 212 081	8,1	8,0	117,0	33,0	6,00	36,50
AL 212 082	8,2	8,0	117,0	33,0	6,00	36,50
AL 212 083	8,3	8,0	117,0	33,0	6,00	36,50
AL 212 084	8,4	8,0	117,0	33,0	6,00	36,50
AL 212 085	8,5	8,0	117,0	33,0	6,00	33,00
AL 212 086	8,6	10,0	125,0	36,0	6,00	33,00
AL 212 087	8,7	10,0	125,0	36,0	6,00	33,00
AL 212 088	8,8	10,0	125,0	36,0	6,00	33,00
AL 212 089	8,9	10,0	125,0	36,0	6,00	33,00
AL 212 090	9,0	10,0	125,0	36,0	6,00	30,50
AL 212 091	9,1	10,0	125,0	36,0	6,00	34,50
AL 212 092	9,2	10,0	125,0	36,0	6,00	34,50
AL 212 093	9,3	10,0	125,0	36,0	6,00	34,50
AL 212 094	9,4	10,0	125,0	36,0	6,00	34,50

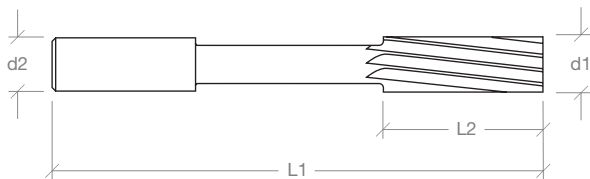
ALESATORE A MACCHINA

DIN
212/D



HSS-E

H7



Codice articolo	d1 h7 mm	d2 h9 mm	L1 mm	L2 mm	Z	Prezzo cad. €
AL 212 095	9,5	10,0	125,0	36,0	6,00	34,50
AL 212 096	9,6	10,0	125,0	36,0	6,00	35,00
AL 212 097	9,7	10,0	125,0	36,0	6,00	35,00
AL 212 098	9,8	10,0	133,0	38,0	6,00	35,00
AL 212 099	9,9	10,0	133,0	38,0	6,00	35,00
AL 212 100	10,0	10,0	133,0	38,0	6,00	31,00
AL 212 110	11,0	10,0	142,0	41,0	6,00	43,50
AL 212 120	12,0	10,0	151,0	44,0	6,00	45,60
AL 212 130	13,0	10,0	151,0	44,0	6,00	50,50
AL 212 140	14,0	14,0	160,0	47,0	8,00	52,00
AL 212 150	15,0	14,0	162,0	50,0	8,00	54,60
AL 212 160	16,0	14,0	170,0	52,0	8,00	56,50
AL 212 170	17,0	14,0	175,0	54,0	8,00	66,00
AL 212 180	18,0	14,0	182,0	56,0	8,00	67,50
AL 212 190	19,0	16,0	189,0	58,0	8,00	79,00
AL 212 200	20,0	16,0	195,0	60,0	8,00	75,00

ALESATORE A MACCHINA

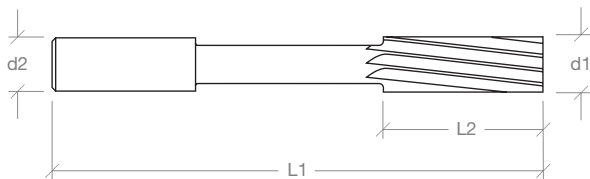
Disponibili anche centesimali.

DIN
212



MG Co

H7



Codice articolo	d1 h7 mm	d2 h9 mm	L1 mm	L2 mm	Z	Prezzo cad. €
ALM 212 010	1,0	1,0	40,0	7,0	4,00	16,50
ALM 212 015	1,5	1,5	40,0	8,0	4,00	16,50
ALM 212 020	2,0	2,0	49,0	11,0	4,00	20,50
ALM 212 022	2,2	2,2	53,0	12,0	4,00	25,50
ALM 212 025	2,5	2,5	57,0	14,0	4,00	23,00
ALM 212 028	2,8	2,8	61,0	15,0	4,00	27,00
ALM 212 030	3,0	3,0	61,0	15,0	4,00	25,50
ALM 212 032	3,2	3,2	65,0	16,0	4,00	31,00
ALM 212 035	3,5	3,5	70,0	18,0	4,00	28,50
ALM 212 040	4,0	4,0	75,0	19,0	4,00	30,00
ALM 212 045	4,5	4,5	80,0	21,0	4,00	32,50
ALM 212 050	5,0	5,0	86,0	23,0	6,00	35,00
ALM 212 055	5,5	5,5	93,0	26,0	6,00	38,00
ALM 212 060	6,0	6,0	93,0	26,0	6,00	40,50
ALM 212 065	6,5	6,5	101,0	28,0	6,00	47,50
ALM 212 070	7,0	7,0	109,0	31,0	6,00	54,00
ALM 212 075	7,5	7,5	109,0	31,0	6,00	61,00
ALM 212 080	8,0	8,0	117,0	33,0	6,00	67,50
ALM 212 100	10,0	10,0	133,0	38,0	6,00	109,00

DATI TECNICI ALESATORI

N.B. Parametri di taglio indicativi

RESISTENZA	RESISTENZA	Vc m/min		DIAMETRO						
		min	max	5	8	10	15	20	25	
Acciai	≤500 N/mm ²	10	12	giri/min	700	438	350	233	175	140
				F mm/min	70	57	53	47	44	35
Acciai	≤700 N/mm ²	8	10	giri/min	573	358	286	191	143	115
				F mm/min	57	47	43	38	36	29
Acciai	500-850 N/mm ²	6	8	giri/min	446	279	223	149	111	89
				F mm/min	45	36	33	30	28	22
Acciai	850-1000 N/mm ²	4	6	giri/min	318	199	159	106	80	64
				F mm/min	25	20	16	16	16	16
Acciai	1000-1200 N/mm ²	3	5	giri/min	255	159	127	85	64	51
				F mm/min	20	16	13	13	13	13
Ghisa	<180 HB	8	10	giri/min	573	358	286	191	143	115
				F mm/min	103	72	66	48	43	34
Ghisa	>180 HB	4	6	giri/min	318	199	159	106	80	64
				F mm/min	38	30	27	21	20	16
Rame poco legato	≤350 N/mm ²	8	12	giri/min	637	398	318	212	159	127
				F mm/min	95	72	64	53	48	38
Ottone truciolo corto	≤600 N/mm ²	12	14	giri/min	828	517	414	276	207	166
				F mm/min	166	129	124	97	83	66
Ottone truciolo lungo	≤600 N/mm ²	10	12	giri/min	700	438	350	233	175	140
				F mm/min	140	109	105	82	70	56
Bronzo truciolo corto	650-850 N/mm ²	12	14	giri/min	828	517	414	276	207	166
				F mm/min	166	29	124	97	83	66
Bronzo truciolo lungo	850-1200 N/mm ²	10	12	giri/min	700	438	350	233	175	140
				F mm/min	140	109	105	82	70	56

TOLLERANZE DI FABBRICAZIONE ALESATORI

Secondo DIN 1420

	D8	D9	D10	D11	E7	E8	E9	F6	F7	F8	F9	G6	G7
1 - 3	+31 +26	+41 +32	+54 +40	+71 +50	+22 +18	+25 +20	+35 +26	+11 +8	+14 +10	+17 +12	+27 +18	+7 +4	+10 +6
3 - 6	+45 +38	+55 +44	+70 +53	+93 +66	+30 +25	+35 +28	+45 +34	+16 +13	+20 +15	+25 +18	+35 +24	+10 +7	+14 +9
6 - 10	+58 +50	+70 +57	+89 +68	+116 +84	+37 +31	+43 +35	+55 +42	+20 +16	+25 +19	+31 +23	+43 +30	+12 +8	+17 +11
10 - 18	+72 +62	+86 +70	+109 +84	+145 +104	+47 +40	+54 +44	+68 +52	+25 +21	+31 +24	+38 +28	+52 +36	+15 +11	+21 +14
18 - 30	+93 +81	+109 +90	+136 +106	+175 +129	+57 +49	+68 +56	+84 +65	+31 +26	+37 +29	+48 +36	+64 +45	+18 +13	+24 +16
30 - 50	+113 +99	+132 +110	+165 +130	+216 +160	+71 +62	+83 +69	+102 +80	+38 +31	+46 +37	+58 +44	+77 +55	+22 +16	+30 +21
50 - 80	+139 +122	+162 +136	+202 +160	+261 +194	+85 +74	+99 +82	+122 +96	+46 +39	+55 +44	+69 +52	+92 +66	+26 +19	+35 +24
80 - 120	+165 +146	+193 +162	+239 +190	+307 +230	+101 +88	+117 +98	+145 +114	+54 +46	+65 +52	+81 +62	+109 +78	+30 +22	+41 +28
120 - 180	+198 +175	+230 +195	+281 +225	+357 +269	+119 +105	+138 +115	+170 +135	+64 +55	+77 +63	+96 +73	+128 +93	+35 +26	+48 +34

	H6	H7	H8	H9	H10	H11	H12	J6	J7	J8	JS6	JS7	JS8	JS9
1 - 3	+5 +2	+8 +4	+11 +6	+21 +12	+34 +20	+51 +30	+85 +50	+1 -2	+2 -2	+3 -2	+2 -1	+3 -1	+4 -1	+8 -1
3 - 6	+6 +3	+10 +5	+15 +8	+25 +14	+40 +23	+63 +36	+102 +60	+3 0	+4 -1	+7 0	+2 -1	+4 -1	+6 -1	+10 -1
6 - 10	+7 +3	+12 +6	+18 +10	+30 +17	+49 +28	+76 +44	+127 +74	+3 -1	+5 -1	+8 0	+3 -1	+5 -1	+7 -1	+12 -1
10 - 18	+9 +5	+15 +8	+22 +12	+36 +20	+59 +34	+93 +54	+153 +90	+4 +0	+7 0	+10 0	+3 -1	+6 -1	+9 -1	+15 -1
18 - 30	+11 +6	+17 +9	+28 +16	+44 +25	+71 +41	+110 +64	+178 +104	+6 +1	+8 0	+15 +3	+4 -1	+7 -1	+11 -1	+18 -1
30 - 50	+13 +7	+21 +12	+33 +19	+52 +30	+85 +50	+136 +80	+212 +124	+7 +1	+10 +1	+18 +4	+5 -1	+8 -1	+13 -1	+21 -1
50 - 80	+16 +9	+25 +14	+39 +22	+62 +36	+102 +60	+161 +94	+255 +150	+10 +3	+13 +2	+21 +4	+6 -1	+10 -1	+16 -1	+25 -1
80 - 120	+18 +10	+29 +16	+45 +26	+73 +42	+119 +70	+187 +110	+297 +174	+12 +4	+16 +3	+25 +6	+7 -1	+12 -1	+18 -1	+30 -1
120 - 180	+21 +12	+34 +20	+53 +30	+85 +50	+136 +80	+212 +124	+340 +200	+14 +5	+20 +6	+31 +8	+8 -1	+14 0	+22 -1	+35 0

	K6	K7	K8	M6	M7	M8	N6	N7	N8	N9	N10	N11	P6	P7
1 - 3	-1 -4	-2 -6	-3 -8	-3 -6	-4 -8	-	-5 -8	-6 -10	-7 -12	-8 -17	-10 -24	-13 -34	-7 -10	-8 -12
3 - 6	0 -3	+1 -4	+2 -5	-3 -6	-2 -7	-1 -8	-7 -10	-6 -11	-5 -12	-5 -16	-8 -25	-12 -39	-11 -14	-10 -15
6 - 10	0 -4	+2 -4	+2 -6	-5 -9	-3 -9	-3 -11	-9 -13	-7 -13	-7 -15	-6 -19	-9 -30	-14 -46	-14 -18	-12 -18
10 - 18	0 -4	+3 -4	+3 -7	-6 -10	-3 -10	-3 -13	-11 -15	-8 -15	-8 -18	-7 -23	-11 -36	-17 -56	-17 -21	-14 -21
18 - 30	0 -5	+2 -6	+5 -7	-6 -11	-4 -12	-1 -13	-13 -18	-11 -19	-8 -20	-8 -27	-13 -43	-20 -66	-20 -25	-18 -26
30 - 50	0 -6	+3 -6	+6 -8	-7 -13	-4 -13	-1 -15	-15 -21	-12 -21	-9 -23	-10 -32	-15 -50	-24 -80	-24 -30	-21 -30
50 - 80	+1 -6	+4 -7	+7 -10	-8 -15	-5 -16	-2 -19	-17 -24	-14 -25	-11 -28	-12 -38	-18 -60	-29 -96	-29 -36	-26 -37
80 - 120	0 -8	+4 -9	+7 -12	-10 -18	-6 -19	-3 -22	-20 -28	-16 -29	-13 -32	-14 -45	-21 -70	-33 -110	-34 -42	-30 -43
120 - 180	0 -9	+6 -8	+10 -13	-12 -21	-6 -20	-2 -25	-24 -33	-18 -32	-14 -37	-15 -50	-24 -80	-38 -126	-40 -49	-34 -48