

Catalogo HSS-E e PM

SERIE AL

**ALESATORI CILINDRICI
A MANO E A MACCHINA**

CYLINDER REAMERS



Rime
UTENSILERIA








SERIE AL

ALESATORI CILINDRICI A MANO E A MACCHINA CYLINDER REAMERS

	COD.	PAG.
	AL0	125
	AL6	126
	AL7	127
	AL8	128
	AL9	129
	AL10	130

ALESATORI CILINDRICI • SERIE NORMALE

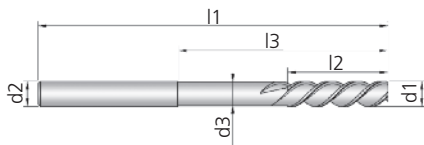
ALO





 Taglio discendente elica 45° sinistra - Codolo cilindrico
 CYLINDER REAMERS - Left-hand 45° helical teeth - Straight shank
 ALÉSOIRS À CYLINDRES - Denture hélicoïdale à 45° à gauche - Queue cylindrique
 MASCHINEN - REIBAHLEN - 45° links schrägverzahnt - Zylinderschaft
 ESCARIADORES CILÍNDRICOS - Labios hélice izquierda 45° - Mango cilíndrico
 ESCARIADORES CILÍNDRICOS - Trés navalhas hélice esquerda 45° - Encabadouro cilíndrico
 Развертка. Левая спираль 45°. Цилиндрический хвостовик. Средняя серия

SERIE AL

NORM.

DIN 212E
ISO 521





SHORT
 NORMAL
 LONG
 EXTRA-LONG

CODE	d1 mm H7	l2 mm	l1 mm	l3 mm	d2 mm h6	d3 mm	Z	Co 8% €
ALO/01	2	11	49	24	2	1.9	3	26,70
ALO/02	2.5	14	57	29	2.5	2.4	3	30,32
ALO/03	3	15	61	33	3	2.9	3	33,31
ALO/04	3.5	18	70	40	3.5	3.4	3	33,95
ALO/05	4	19	75	43	4	3.7	3	33,95
ALO/06	4.5	21	80	45	4.5	4.2	3	34,72
ALO/07	5	23	86	51	5	4.7	3	34,72
ALO/08	5.5	26	93	55	5.5	5.2	3	35,36
ALO/09	6	26	93	55	6	5.6	3	34,72
ALO/10	6.5	28	101	61	6.5	6.1	3	40,14
ALO/11	7	31	109	67	7	6.6	3	42,22
ALO/12	8	33	117	72	8	7.6	3	41,56
ALO/13	9	36	125	75	9	8.4	3	44,43
ALO/14	10	38	133	83	10	9.4	4	45,23
ALO/15	11	41	142	90	11	10.3	4	54,14
ALO/16	12	44	151	96	12	11.3	4	53,48
ALO/17	13	44	151	96	13	12.2	4	61,58
ALO/18	14	47	160	100	14	12.8	4	60,13
ALO/19	15	50	162	102	15	13.8	4	63,85
ALO/20	16	52	170	107	16	14.8	4	68,24


ACCAI
STEELS




GHISE
CAST IRON




ACCAI INOSSIDABILI
STAINLESS STEELS




SUPER LEGHE - TITANIO
SUPERALLOYS - TITANIUM



LEGHE LEGGERE
LIGHT ALLOYS



MATERIALI NON FERROSI
NON FERROUS MATERIAL



Diametri decimali e tolleranze diverse da H7 si forniscono a richiesta
Decimal diameter and different tolerance from H7 upon requirements

▲ CONSIGLIATO
RECOMMENDED

▶ ACCETTABILE
ACCEPTABLE


▼ SCONSIGLIATO
NOT RECOMMENDED

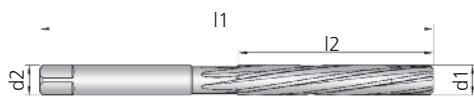


ALESATORI A MANO • SERIE NORMALE

**SERIE
AL**

AL6


 Denti elicoidali sinistri taglio destro - Codolo cilindrico con quadro - Per fori cilindrici
 HAND REAMERS - Left-hand helical teeth, right-hand cutting - Straight shank with square - For parallel holes
 ALÉSQUIRES À MAIN - Denture hélicoïdale à gauche, coupe à droite - Queue cylindrique carrée - Pour trous cylindriques
 HAND - REIBAHLEN - Spiralgenutet, rechtsschneidend, Linksdrall Zylinderschaft mit Vierkantmitnehmer - Für zylindrische Bohrungen
 ESCARIADORES A MANO - Labios helicoidales izquierda, cortante derecho - Mango cilíndrico con cuadro - Para agujeros cilíndricos
 ESCARIADORES A MANO - Navalhas helicoidales esquerda, cortante direito - Encabadouro cilíndrico con cuadro - Para agujeros cilíndricos
 Развертка ручная. Левая спираль, правое вращение. Средняя серия



HSS-E
Co5

N



NORM.

UNI 6852
DIN 206B
ISO 236/1

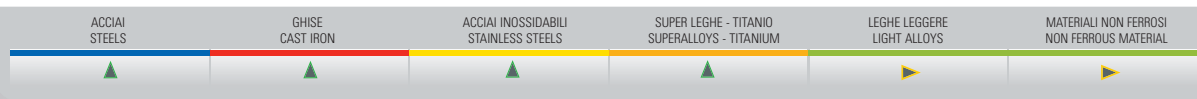
SHORT
NORMAL
LONG
EXTRA-LONG

CODE	d1 mm H7	l2 mm	l1 mm	d2 mm h6	Z	Co 5% €
AL6/00	2	25	50	2	4	30,25
AL6/01	3	31	62	3	4	30,25
AL6/02	4	38	76	4	5	29,44
AL6/03	5	44	87	5	5	30,96
AL6/04	6	47	93	6	5	32,48
AL6/05	7	54	107	7	6	36,37
AL6/06	8	58	115	8	6	37,20
AL6/07	9	62	124	9	6	41,79
AL6/08	10	66	133	10	6	44,14
AL6/09	11	71	142	11	8	52,88
AL6/10	12	76	152	12	8	55,99
AL6/11	13	76	152	13	8	70,51
AL6/12	14	81	163	14	8	72,74
AL6/13	15	81	163	15	8	80,50
AL6/14	16	87	175	16	8	85,22
AL6/15	17	87	175	17	8	94,58
AL6/16	18	93	188	18	8	99,39
AL6/17	19	93	188	19	8	112,82
AL6/18	20	100	201	20	8	116,79

▲
CONSIGLIATO
RECOMMENDED








▶
ACCETTABILE
ACCEPTABLE

▼
SCONSIGLIATO
NOT RECOMMENDED



ALESATORI A MACCHINA • SERIE EXTRA-LUNGA

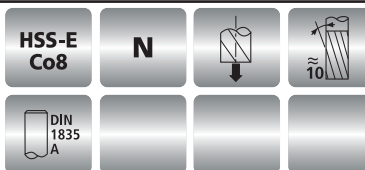
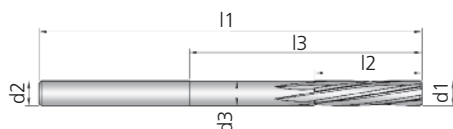
AL7

 Denti elicoidali sinistri taglio destro - Codolo cilindrico
 MACHINE REAMERS, EXTRA-LONG TYPE - Left-hand helical teeth, right-hand cutting - Straight shank
 ALESOIRS POUR MACHINES, TYP EXTRA LONG - Denture hélicoïdale à gauche, coupe à droite - Queue cylindrique
 MASCHINEN - REIBAHLEN, EXTRA LANGE AUSFÜHRUNG - Spiralgenutet, rechtsschneidend, Linksdrall - Zylinderschaft
 ESCARIADORES A MAQUINA - Labios helicoidales izquierda, cortante derecho - Mango cilíndrico
 ESCARIADORES A MANO - Navalhas helicoidais esquerda, cortante direito - Encabadouro cilíndrico
 Развертка машинная. Левая спираль, правое вращение. Цилиндрический хвостовик. Ультралинная серия

SERIE AL

NORM.

UNI
DIN 212D
ISO 521



SHORT
NORMAL
LONG
EXTRA-LONG

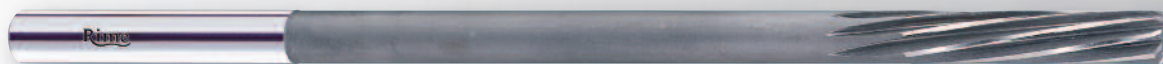
CODE	d1 mm H7	l2 mm	l1 mm	l3 mm	d2 mm h6	d3 mm	Z	Co 8% €
AL7/01	2	18	110	75	2	1.9	4	59,55
AL7/02	2.5	20	120	80	2.5	2.4	4	56,19
AL7/03	3	20	120	80	3	2.9	4	53,59
AL7/04	3.5	30	150	110	3.5	3.4	6	69,79
AL7/05	4	30	150	110	4	3.9	6	63,07
AL7/06	4.5	35	180	135	4.5	4.4	6	71,73
AL7/07	5	35	180	135	5	4.9	6	66,09
AL7/08	5.5	40	200	150	5.5	5.4	6	77,36
AL7/09	6	40	200	150	6	5.9	6	72,60
AL7/10	6.5	45	200	150	6.5	6.4	6	77,36
AL7/11	7	45	200	150	7	6.9	6	84,74
AL7/12	8	45	200	150	8	7.9	6	81,40
AL7/13	9	50	220	160	9	8.9	6	97,42
AL7/14	10	50	220	160	10	9.8	6	91,65
AL7/15	11	55	250	190	11	10.8	6	102,75
AL7/16	12	55	250	190	12	11.8	6	103,69

ACCIAI STEELS	GHISE CAST IRON	ACCIAI INOSSIDABILI STAINLESS STEELS	SUPER LEGHE - TITANIO SUPERALLOYS - TITANIUM	LEGHE LEGGERE LIGHT ALLOYS	MATERIALI NON FERROSI NON FERROUS MATERIAL
▲	▲	▲	▲	▶	▶

▲
CONSIGLIATO
RECOMMENDED

▶
ACCETTABILE
ACCEPTABLE


▼
SCONSIGLIATO
NOT RECOMMENDED

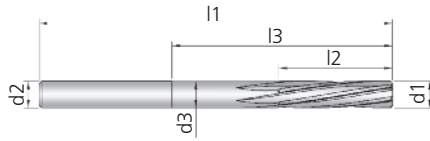





ALESATORI A MACCHINA • SERIE NORMALE

**SERIE
AL**

AL8


 Denti elicoidali sinistri taglio destro - Codolo cilindrico - Per fori cilindrici
 MACHINE REAMERS - Left-hand helical teeth, right-hand cutting - Straight shank. For parallel holes
 ALÉSOIRS POUR MACHINES - Denture hélicoïdale à gauche, coupe à droite - Queue cylindrique. Pour trous cylindriques
 MASCHINEN - REIBAHLEN - Spiralgenutet, rechtsschneidend, Linksdrall - Zylinderschaft. Für zylindrische Bohrungen
 ESCARIADORES A MÁQUINA - Labios helicoidales izquierda, cortante derecho - Mango cilíndrico - Para agujeros cilíndricos
 ESCARIADORES À MÁQUINA - Quatro navalhas helicoidais esquerda, cortante direito - Encabadouro cilíndrico - Para agujeros cilíndricos
 Развертка машинная. Левая спираль, правое вращение. Цилиндрический хвостовик. Средняя серия



HSS-E Co8 **N**  


NORM.	
UNI	6853
DIN	212D
ISO	521

Diametri decimali e tolleranze diverse da H7 si forniscono a richiesta
Decimal diameter and different tolerance from H7 upon requirements

 CONSIGLIATO RECOMMENDED
 ACCETTABILE ACCEPTABLE
 SCONSIGLIATO NOT RECOMMENDED








CODE	d1 mm H7	l2 mm	l1 mm	l3 mm	d2 mm h6	d3 mm	Z	Co 8% €
AL8/01	2	11	49	24	2	1.9	5	22,49
AL8/02	2.5	14	57	29	2.5	2.4	5	22,78
AL8/03	3	15	61	33	3	2.9	5	24,47
AL8/04	3.5	18	70	39	3.5	3.4	5	25,93
AL8/05	4	19	75	43	4	3.7	5	26,75
AL8/06	4.5	21	80	45	4.5	4.2	5	28,99
AL8/07	5	23	86	51	5	4.7	5	29,67
AL8/08	5.5	26	93	55	5.5	5.2	6	30,46
AL8/09	6	26	93	55	6	5.6	6	31,92
AL8/10	6.5	28	101	61	6.5	6.1	6	32,82
AL8/11	7	31	109	67	7	6.6	6	33,61
AL8/12	8	33	117	72	8	7.6	6	35,03
AL8/13	9	36	125	75	9	8.4	6	37,91
AL8/14	10	38	133	83	10	9.4	6	41,56
AL8/15	11	41	142	90	11	10.3	8	45,66
AL8/16	12	44	151	96	12	11.3	8	48,72
AL8/17	13	44	151	96	13	12.2	8	51,08
AL8/18	14	47	160	100	14	12.8	8	56,50
AL8/19	15	50	162	102	15	13.8	8	58,86
AL8/20	16	52	170	107	16	14.8	8	61,92

ACCIAI STEELS	GHISE CAST IRON	ACCIAI INOSSIDABILI STAINLESS STEELS	SUPER LEGHE - TITANIO SUPERALLOYS - TITANIUM	LEGHE LEGGERE LIGHT ALLOYS	MATERIALI NON FERROSI NON FERROUS MATERIAL
▲	▲	▲	▲	▶	▶



ALESATORI A MACCHINA TIPO MANICOTTO

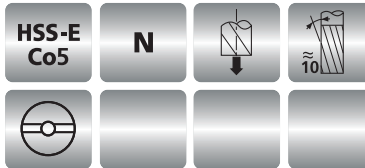
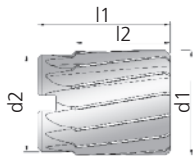
AL9

-  Foro conico 1:30 - Dentatura elicoidale 10°
-  SHELL MACHINE REAMERS - 1:30 taper hole - 10° helical teeth
-  ALÉSOIRS CREUX - Alésage conique 1:30 - Denture hélicoïdale 10°
-  AUFSTECK - REIBAHLEN - Kegelbohrung 1:30 - 10° schrägverzahnt
-  ESCARIADORES A MÁQUINA TIPO MANICOTTO - Agujero cónico 1:30 - Labios helicoidales 10°
-  ESCARIADORES A MAQUINA TIPO MANICOTTO - Agujero conico 1:30 - Navalhas helicoidales 10°
-  Развертка насадная

SERIE AL

NORM.

UNI 6855
DIN 219B
ISO 2402



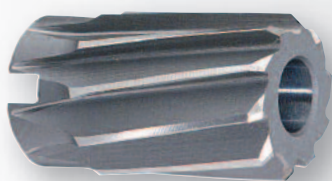
CODE	d1 mm H7	l2 mm	l1 mm	d2 mm	d foro mm conicità 1:30	Z	Co 5% €
AL9/01	24	32	45	22	13	10	101,13
AL9/02	25	32	45	23	13	10	104,26
AL9/03	26	32	45	24	13	10	105,81
AL9/04	27	32	45	25	13	10	111,34
AL9/05	28	32	45	26	13	10	111,34
AL9/06	29	32	45	27	13	10	116,15
AL9/07	30	32	45	28	13	10	116,15
AL9/08	31	36	50	28	16	10	124,99
AL9/09	32	36	50	29	16	10	124,99
AL9/10	33	36	50	30	16	10	130,42
AL9/11	34	36	50	31	16	10	130,42
AL9/12	35	36	50	32	16	10	132,78
AL9/13	36	40	56	33	19	12	148,58
AL9/14	37	40	56	34	19	12	150,77
AL9/15	38	40	56	35	19	12	150,77
AL9/16	39	40	56	36	19	12	164,71
AL9/17	40	40	56	37	19	12	164,71
AL9/18	42	40	56	39	19	12	173,12
AL9/19	44	45	63	40	22	12	189,27
AL9/20	45	45	63	41	22	12	192,30
AL9/21	46	45	63	42	22	14	197,67
AL9/22	48	45	63	44	22	14	206,23
AL9/23	49	45	63	45	22	14	213,96
AL9/24	50	45	63	46	22	14	213,96
AL9/25	52	50	71	48	27	14	239,94
AL9/26	55	50	71	51	27	14	253,87
AL9/27	58	50	71	54	27	14	269,31
AL9/28	60	50	71	56	27	16	281,00

ACCIAI STEELS	GHISE CAST IRON	ACCIAI INOSSIDABILI STAINLESS STEELS	SUPER LEGHE - TITANIO SUPERALLOYS - TITANIUM	LEGHE LEGGERE LIGHT ALLOYS	MATERIALI NON FERROSI NON FERROUS MATERIAL
▲	▲	▲	▲	▼	▼

▲ CONSIGLIATO
RECOMMENDED

▲ ACCETTABILE
ACCEPTABLE


▼ SCONSIGLIATO
NOT RECOMMENDED

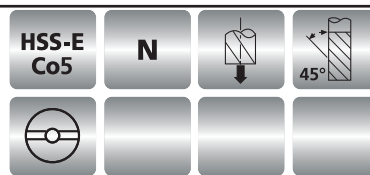
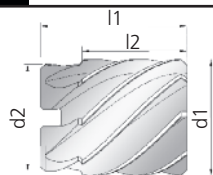


ALESATORI A MACCHINA TIPO MANICOTTO

**SERIE
AL**

AL10


 Foro conico 1:30 - Dentatura elicoidale discendente 45°
 SHELL MACHINE REAMERS - 1:30 taper hole - 45° helical teeth
 ALÉSQUIRES CREUX - Alésage conique 1:30 - Denture hélicoïdale 45°
 AUFSTECK - REIBAHLEN - Kegelbohrung 1:30 - 45° schrägverzahnt
 ESCARIADORES A MÁQUINA TIPO MANICOTTO - Agujero conico 1:30 - Labios 45°
 ESCARIADORES A MAQUINA TIPO MANICOTTO - Agujero conico 1:30 - Labios 45°
 Развертка насадная с углом винтовой канавки 45°



NORM.

UNI 6855
 DIN 219
 ISO 2402

Diametri decimali e tolleranze diverse da H7 si forniscono a richiesta
 Decimal diameter and different tolerance from H7 upon requirements

 CONSIGLIATO RECOMMENDED
 ACCETTABILE ACCEPTABLE
 SCONSIGLIATO NOT RECOMMENDED

CODE	d1 mm H7	l2 mm	l1 mm	d2 mm	d foro mm conicità 1:30	Z	Co 5% €
AL10/01	24	32	45	22	13	5	101,13
AL10/02	25	32	45	23	13	5	103,56
AL10/03	26	32	45	24	13	5	105,81
AL10/04	27	32	45	25	13	5	111,34
AL10/05	28	32	45	26	13	5	113,74
AL10/06	29	32	45	27	13	6	117,01
AL10/07	30	32	45	28	13	6	117,01
AL10/08	31	36	50	28	16	6	117,19
AL10/09	32	36	50	29	16	6	117,19
AL10/10	33	36	50	30	16	7	124,99
AL10/11	34	36	50	31	16	7	124,99
AL10/12	35	36	50	32	16	7	126,51
AL10/13	36	40	56	33	19	8	144,70
AL10/14	37	40	56	34	19	8	148,58
AL10/15	38	40	56	35	19	8	148,58
AL10/16	39	40	56	36	19	8	160,85
AL10/17	40	40	56	37	19	8	160,85
AL10/18	42	40	56	39	19	8	167,75
AL10/19	44	45	63	40	22	8	180,86
AL10/20	45	45	63	41	22	8	190,09
AL10/21	46	45	63	42	22	8	194,66
AL10/22	48	45	63	44	22	8	202,37
AL10/23	49	45	63	45	22	8	210,09
AL10/24	50	45	63	46	22	8	210,09
AL10/25	52	50	71	48	27	8	235,21
AL10/26	55	50	71	51	27	8	259,29
AL10/27	58	50	71	54	27	10	270,15
AL10/28	60	50	71	56	27	10	282,53

