SILMAX

QUALITY AS A STANDARD

FORATURA
DRILLING

200 YEARS
SILMAX
-1819/2019-

200 YEARS
OF PERFECT
SHAPES

PHM Punte Alto Rendimento / High Performance Drills

	Codice / Code	Ø (D mm)	Descrizione	Description
	3030A	2,6 ÷ 16,0	Punta 3xD senza fori	3xD drill without internal coolant
	3031A	3,0 ÷ 20,0	Punta 3xD con fori	3xD drill with internal coolant
	3050A	0,3 ÷ 16,0	Punta 5xD senza fori	5xD drill without internal coolant
	3051A	3,0 ÷ 20,0	Punta 5xD con fori	5xD drill with internal coolant
	3081A	1,0 ÷ 16,0	Punta 8xD con fori	8xD drill with internal coolant
	780	2,00 ÷ 12,00	Punte per foratura manuale di pannelli CFRP e sandwich Titanio/Alluminio	Manual drill for CFRP panels and Titanium/ Aluminium sandwiches

PHG Punte a Gradino / Step Drills

	Codice / Code	Ø (D mm)		
	3825	M4 ÷ M12	Punta per prefori di maschiatura ad esecuzione dello smusso con fori di lubrificazione	Step drill for core drill sizes for taps with internal coolant
	3835	M4 ÷ M12	Punta per prefori di maschiatura ad esecuzione dello smusso con fori di lubrificazione	Step drill for core drill sizes for taps with internal coolant

PHC Punte a Centrare / Center Drills

	Codice / Code	Ø (D mm)		
	351	1,0 ÷ 5,0	Punta a centrare	Center drill
	357	3,0 ÷ 16,0	Punta a centrare	Center drill
	358	3,0 ÷ 12,0	Punta a centrare	Center drill

ALR Alesatori Centesimali / Reamers

	Codice / Code	Ø (D mm)		
	503	0,9 ÷ 12,47	Alesatore centesimale	Reamer

24h

FORATURA
DRILLING

Acciaio Steel	**Ghise** Cast iron	**Acciai Temprati** Hardened steels	**Acciaio Inox** Stainless steel	**Titanio** Titanium	**Leghe Leggere** Light Alloys	**PH Duplex**	**Superleghe** Superalloys	**Compositi** Composite Materials	**Pagina** Page
●	●	-	●	●	-	●	●	●	6
●	●	-	●	●	-	●	●	●	8
●	●	-	●	●	-	●	●	●	10
●	●	-	●	●	-	●	●	●	12
●	●	-	●	●	-	●	●	●	15
-	-	-	-	-	-	-	-	●	16
1	2	3	4	5	6	7	8	9	
●	●	-	●	●	-	●	●	●	22
●	●	-	●	●	-	●	●	●	22
1	2	3	4	5	6	7	8	9	
●	●	-	●	●	●	●	●	●	23
●	●	-	●	●	●	●	●	●	24
●	●	-	●	●	●	●	●	●	24
1	2	3	4	5	6	7	8	9	
●	●	-	●	●	●	●	●	●	26

Legenda
Legend
→ 4

Punte Alto Rendimento
High Performance Drills
→ 6

Punte a Gradino
Step Drills
→ 21

Punte a Centrare
Center Drills
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Alesatori Centesimali
Reamers
→ 25

Silservice
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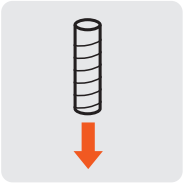
Scarica la versione digitale della brochure.
Download the digital verison of the brochure.
silmax.it/drilling

LEGENDA
LEGEND

Senza fori di lubrificazione interna
Without internal lubrication holes

Con fori di lubrificazione interna
With internal lubrication holes



Direzioni di avanzamento
Feed direction

Angolo elica
Helix angle

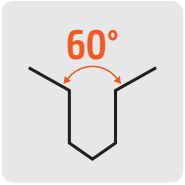
Norma di riferimento
Reference norm

Esecuzione Standard
Standard Execution

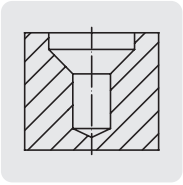
Attacco Whistle Notch Din 6535HE (su richiesta)
Whistle Notch Din 6535HE (on request)

Profondità di foratura
Drilling depth

Angolo di punta
Nose angle



Angolo di Svasatura
Countersink angle



Profilo del foro
Profile of the hole

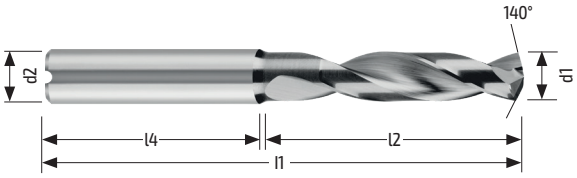
Servizio 24h
Fast delivery

Consegna rapida
Fast delivery

PUNTE ALTO RENDIMENTO
HIGH PERFORMANCE DRILLS

3030A

Punta 3xD senza fori
3xD drill without internal coolant



DIN 6537K
DIN 6535 HA (Standard)
W/N DIN 6535 HE (On request)

1 2 4 5 7 8 9

140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3030A026	2,6	6	20	36	62
HMX3030A027	2,7				
HMX3030A028	2,8				
HMX3030A029	2,9				
HMX3030A030	3,0				
HMX3030A031	3,1				
HMX3030A032	3,2				
HMX3030A033	3,3				
HMX3030A034	3,4				
HMX3030A035	3,5				
HMX3030A036	3,6				
HMX3030A037	3,7				
HMX3030A038	3,8	6	24	36	66
HMX3030A039	3,9				
HMX3030A040	4,0				
HMX3030A041	4,1				
HMX3030A042	4,2				
HMX3030A043	4,3				
HMX3030A044	4,4				
HMX3030A045	4,5				
HMX3030A046	4,6				
HMX3030A047	4,7				
HMX3030A048	4,8	6	28		
HMX3030A049	4,9				
HMX3030A050	5,0				
HMX3030A051	5,1				
HMX3030A052	5,2				
HMX3030A053	5,3				
HMX3030A054	5,4				
HMX3030A055	5,5				
HMX3030A056	5,6				
HMX3030A057	5,7				
HMX3030A058	5,8				
HMX3030A059	5,9				
HMX3030A060	6,0				
HMX3030A061	6,1	8	34	36	79
HMX3030A062	6,2				
HMX3030A063	6,3				
HMX3030A064	6,4				
HMX3030A065	6,5				
HMX3030A066	6,6				
HMX3030A067	6,7				
HMX3030A068	6,8				

3030A

Punta 3xD senza fori
3xD drill without internal coolant

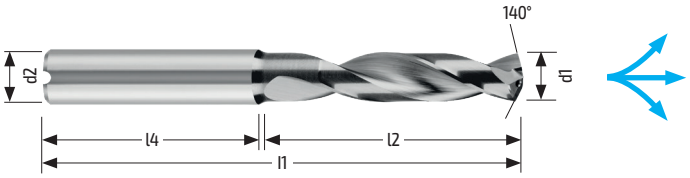
140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3030A069	6,9	8	34	36	79
HMX3030A070	7,0				
HMX3030A072	7,2	8	41		
HMX3030A074	7,4				
HMX3030A075	7,5				
HMX3030A078	7,8				
HMX3030A079	7,9				
HMX3030A080	8,0				
HMX3030A081	8,1	10	47	40	89
HMX3030A082	8,2				
HMX3030A083	8,3				
HMX3030A085	8,5				
HMX3030A086	8,6				
HMX3030A087	8,7				
HMX3030A088	8,8				
HMX3030A089	8,9				
HMX3030A090	9,0				
HMX3030A091	9,1				
HMX3030A093	9,3				
HMX3030A095	9,5				
HMX3030A098	9,8				
HMX3030A099	9,9				
HMX3030A100	10,0				
HMX3030A102	10,2	12	55	45	102
HMX3030A105	10,5				
HMX3030A106	10,6				
HMX3030A108	10,8				
HMX3030A110	11,0				
HMX3030A113	11,3				
HMX3030A114	11,4				
HMX3030A115	11,5				
HMX3030A117	11,7				
HMX3030A118	11,8				
HMX3030A119	11,9				
HMX3030A120	12,0				
HMX3030A123	12,3	14	60	45	107
HMX3030A125	12,5				
HMX3030A128	12,8				
HMX3030A130	13,0				
HMX3030A135	13,5				
HMX3030A138	13,8				
HMX3030A140	14,0				
HMX3030A141	14,1	16	65	48	115
HMX3030A142	14,2				
HMX3030A145	14,5				
HMX3030A148	14,8				
HMX3030A150	15,0				
HMX3030A151	15,1				
HMX3030A153	15,3				
HMX3030A155	15,5				
HMX3030A158	15,8				
HMX3030A160	16,0				

1 Acciaio Steel | **2** Ghise Cast Iron | **3** Acciai Temprati Hardened Steel | **4** Acciaio Inox Stainless Steel | **5** Titanio Titanium | **6** Leghe Leggere Light Alloys | **7** PH Duplex | **8** Superleghe Superalloys | **9** Compositi Composite Materials | **10** Grafite Graphite

3031A

Punta 3xD con fori
3xD drill with internal coolant



DIN 6537K

DIN 6535 HA (Standard)

1 2 4 5 7 8 9

140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3031A030	3,0	6	20	36	62
HMX3031A031	3,1				
HMX3031A032	3,2				
HMX3031A033	3,3				
HMX3031A034	3,4				
HMX3031A035	3,5				
HMX3031A036	3,6				
HMX3031A037	3,7				
HMX3031A038	3,8	6	24	36	66
HMX3031A039	3,9				
HMX3031A040	4,0				
HMX3031A041	4,1				
HMX3031A042	4,2				
HMX3031A043	4,3				
HMX3031A044	4,4				
HMX3031A045	4,5				
HMX3031A046	4,6				
HMX3031A047	4,7				
HMX3031A048	4,8	6	28		
HMX3031A049	4,9				
HMX3031A050	5,0				
HMX3031A051	5,1				
HMX3031A052	5,2				
HMX3031A053	5,3				
HMX3031A054	5,4				
HMX3031A055	5,5				
HMX3031A056	5,6				
HMX3031A057	5,7				
HMX3031A058	5,8				
HMX3031A059	5,9				
HMX3031A060	6,0				
HMX3031A061	6,1	8	34	36	79
HMX3031A062	6,2				
HMX3031A063	6,3				
HMX3031A064	6,4				
HMX3031A065	6,5				
HMX3031A066	6,6				
HMX3031A067	6,7				
HMX3031A068	6,8				
HMX3031A069	6,9				
HMX3031A070	7,0				
HMX3031A071	7,1	8	41		
HMX3031A072	7,2				
HMX3031A073	7,3				
HMX3031A074	7,4				
HMX3031A075	7,5				
HMX3031A076	7,6				
HMX3031A077	7,7				
HMX3031A078	7,8				
HMX3031A079	7,9				
HMX3031A080	8,0				

3031A

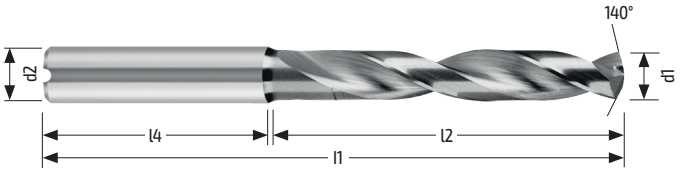
Punta 3xD con fori
3xD drill with internal coolant

140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3031A081	8,1	10	47	40	89
HMX3031A082	8,2				
HMX3031A083	8,3				
HMX3031A084	8,4				
HMX3031A085	8,5				
HMX3031A086	8,6				
HMX3031A087	8,7				
HMX3031A088	8,8				
HMX3031A089	8,9				
HMX3031A090	9,0				
HMX3031A091	9,1				
HMX3031A092	9,2				
HMX3031A093	9,3				
HMX3031A094	9,4				
HMX3031A095	9,5				
HMX3031A096	9,6				
HMX3031A097	9,7				
HMX3031A098	9,8				
HMX3031A099	9,9				
HMX3031A100	10,0				
HMX3031A101	10,1	12	55	45	102
HMX3031A102	10,2				
HMX3031A103	10,3				
HMX3031A104	10,4				
HMX3031A105	10,5				
HMX3031A106	10,6				
HMX3031A107	10,7				
HMX3031A108	10,8				
HMX3031A109	10,9				
HMX3031A110	11,0				
HMX3031A111	11,1				
HMX3031A112	11,2				
HMX3031A113	11,3				
HMX3031A114	11,4				
HMX3031A115	11,5				
HMX3031A116	11,6				
HMX3031A117	11,7				
HMX3031A118	11,8				
HMX3031A119	11,9				
HMX3031A120	12,0				
HMX3031A121	12,1	14	60	45	107
HMX3031A122	12,2				
HMX3031A125	12,5				
HMX3031A128	12,8				
HMX3031A130	13,0				
HMX3031A135	13,5				
HMX3031A138	13,8				
HMX3031A140	14,0				
HMX3031A142	14,2	16	65	48	115
HMX3031A145	14,5				
HMX3031A148	14,8				
HMX3031A150	15,0				
HMX3031A155	15,5				
HMX3031A158	15,8				
HMX3031A160	16,0				
HMX3031A165	16,5	18	73	48	123
HMX3031A170	17,0				
HMX3031A175	17,5				
HMX3031A180	18,0				
HMX3031A185	18,5	20	79	50	131
HMX3031A190	19,0				
HMX3031A195	19,5				
HMX3031A200	20,0				

3050A

Punta 5xD senza fori
5xD drill without internal coolant



DIN 6537L | DIN 6535 HA (Standard) | W/N DIN 6535 HE (On request)

1 2 4 5 7 8 9

140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3050A003	0,3	3	1,5	-	38
HMX3050A004	0,4		2,0		
HMX3050A005	0,5		4,0		
HMX3050A006	0,6		4,5		
HMX3050A007	0,7		5,6		
HMX3050A008	0,8		6,5		
HMX3050A009	0,9		7,0		
HMX3050A010	1,0		9		
HMX3050A011	1,1				
HMX3050A012	1,2		10		
HMX3050A013	1,3				
HMX3050A014	1,4		12		
HMX3050A015	1,5				
HMX3050A016	1,6		11,5		
HMX3050A017	1,7				
HMX3050A018	1,8				
HMX3050A019	1,9				
HMX3050A020	2,0	3	13	-	50
HMX3050A021	2,1				
HMX3050A022	2,2		14		
HMX3050A023	2,3				
HMX3050A024	2,4		15		
HMX3050A025	2,5				
HMX3050A026	2,6	6	28	36	66
HMX3050A027	2,7				
HMX3050A028	2,8				
HMX3050A029	2,9				
HMX3050A030	3,0				
HMX3050A031	3,1				
HMX3050A032	3,2				
HMX3050A033	3,3				
HMX3050A034	3,4				
HMX3050A035	3,5				
HMX3050A036	3,6				
HMX3050A037	3,7				
HMX3050A038	3,8	6	36	36	74
HMX3050A039	3,9				
HMX3050A040	4,0				
HMX3050A041	4,1				
HMX3050A042	4,2				
HMX3050A043	4,3				
HMX3050A044	4,4				
HMX3050A045	4,5				
HMX3050A046	4,6				
HMX3050A047	4,7				

1 Acciaio Steel | **2** Ghise Cast Iron | **3** Acciai Temprati Hardened Steel | **4** Acciaio Inox Stainless Steel | **5** Titanio Titanium | **6** Leghe Leggere Light Alloys | **7** PH Duplex | **8** Superleghe Superalloys | **9** Compositi Composite Materials | **10** Grafite Graphite

3050A

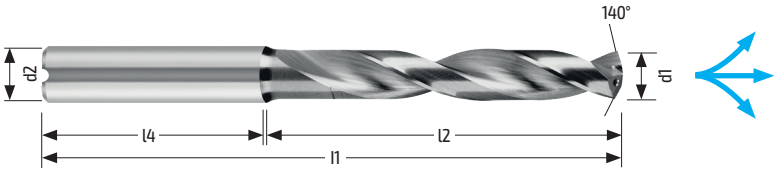
Punta 5xD senza fori
5xD drill without internal coolant

140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3050A048	4,8	6	44	36	82
HMX3050A049	4,9				
HMX3050A050	5,0				
HMX3050A051	5,1				
HMX3050A052	5,2				
HMX3050A053	5,3				
HMX3050A054	5,4				
HMX3050A055	5,5				
HMX3050A056	5,6				
HMX3050A057	5,7				
HMX3050A058	5,8				
HMX3050A059	5,9				
HMX3050A060	6,0				
HMX3050A061	6,1	8	53	36	91
HMX3050A063	6,3				
HMX3050A065	6,5				
HMX3050A068	6,8				
HMX3050A069	6,9				
HMX3050A070	7,0				
HMX3050A074	7,4				
HMX3050A075	7,5				
HMX3050A078	7,8				
HMX3050A080	8,0				
HMX3050A085	8,5	10	61	40	103
HMX3050A086	8,6				
HMX3050A087	8,7				
HMX3050A088	8,8				
HMX3050A090	9,0				
HMX3050A093	9,3				
HMX3050A095	9,5				
HMX3050A098	9,8				
HMX3050A100	10,0				
HMX3050A102	10,2	12	71	45	118
HMX3050A105	10,5				
HMX3050A106	10,6				
HMX3050A108	10,8				
HMX3050A110	11,0				
HMX3050A112	11,2				
HMX3050A115	11,5				
HMX3050A118	11,8				
HMX3050A119	11,9				
HMX3050A120	12,0				
HMX3050A122	12,2	14	77	45	124
HMX3050A125	12,5				
HMX3050A126	12,6				
HMX3050A127	12,7				
HMX3050A128	12,8				
HMX3050A130	13,0				
HMX3050A135	13,5				
HMX3050A138	13,8				
HMX3050A140	14,0				
HMX3050A145	14,5	16	83	48	133
HMX3050A148	14,8				
HMX3050A150	15,0				
HMX3050A155	15,5				
HMX3050A158	15,8				
HMX3050A160	16,0				

3051A

Punta 5xD con fori
5xD drill with internal coolant



DIN 6537L

DIN 6535 HA (Standard)

1 2 4 5 7 8 9

140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3051A030	3,0	6	28	36	66
HMX3051A031	3,1				
HMX3051A032	3,2				
HMX3051A033	3,3				
HMX3051A034	3,4				
HMX3051A035	3,5				
HMX3051A036	3,6				
HMX3051A037	3,7				
HMX3051A038	3,8	6	36	36	74
HMX3051A039	3,9				
HMX3051A040	4,0				
HMX3051A041	4,1				
HMX3051A042	4,2				
HMX3051A043	4,3				
HMX3051A044	4,4				
HMX3051A045	4,5				
HMX3051A046	4,6				
HMX3051A047	4,7				
HMX3051A048	4,8	6	44	36	82
HMX3051A049	4,9				
HMX3051A050	5,0				
HMX3051A051	5,1				
HMX3051A052	5,2				
HMX3051A053	5,3				
HMX3051A054	5,4				
HMX3051A055	5,5				
HMX3051A056	5,6				
HMX3051A057	5,7				
HMX3051A058	5,8				
HMX3051A059	5,9				
HMX3051A060	6,0				
HMX3051A061	6,1	8	53	36	91
HMX3051A062	6,2				
HMX3051A063	6,3				
HMX3051A064	6,4				
HMX3051A065	6,5				
HMX3051A066	6,6				
HMX3051A067	6,7				
HMX3051A068	6,8				
HMX3051A069	6,9				
HMX3051A070	7,0				
HMX3051A071	7,1				
HMX3051A072	7,2				
HMX3051A073	7,3				
HMX3051A074	7,4				
HMX3051A075	7,5				
HMX3051A076	7,6				
HMX3051A077	7,7				
HMX3051A078	7,8				
HMX3051A079	7,9				
HMX3051A080	8,0				

3051A

Punta 5xD con fori
5xD drill with internal coolant

140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3051A081	8,1	10	61	40	103
HMX3051A082	8,2				
HMX3051A083	8,3				
HMX3051A084	8,4				
HMX3051A085	8,5				
HMX3051A086	8,6				
HMX3051A087	8,7				
HMX3051A088	8,8				
HMX3051A089	8,9				
HMX3051A090	9,0				
HMX3051A091	9,1				
HMX3051A092	9,2				
HMX3051A093	9,3				
HMX3051A094	9,4				
HMX3051A095	9,5				
HMX3051A096	9,6				
HMX3051A097	9,7				
HMX3051A098	9,8				
HMX3051A099	9,9				
HMX3051A100	10,0				
HMX3051A101	10,1	12	71	45	118
HMX3051A102	10,2				
HMX3051A103	10,3				
HMX3051A104	10,4				
HMX3051A105	10,5				
HMX3051A106	10,6				
HMX3051A107	10,7				
HMX3051A108	10,8				
HMX3051A109	10,9				
HMX3051A110	11,0				
HMX3051A111	11,1				
HMX3051A112	11,2				
HMX3051A113	11,3				
HMX3051A114	11,4				
HMX3051A115	11,5				
HMX3051A116	11,6				
HMX3051A117	11,7				
HMX3051A118	11,8				
HMX3051A119	11,9				
HMX3051A120	12,0				
HMX3051A121	12,1	14	77	45	124
HMX3051A122	12,2				
HMX3051A123	12,3				
HMX3051A124	12,4				
HMX3051A125	12,5				
HMX3051A126	12,6				
HMX3051A127	12,7				
HMX3051A128	12,8				
HMX3051A129	12,9				
HMX3051A130	13,0				
HMX3051A131	13,1				
HMX3051A132	13,2				
HMX3051A135	13,5				
HMX3051A138	13,8				
HMX3051A140	14,0				

Notes

3051A

Punta 5xD con fori
5xD drill with internal coolant

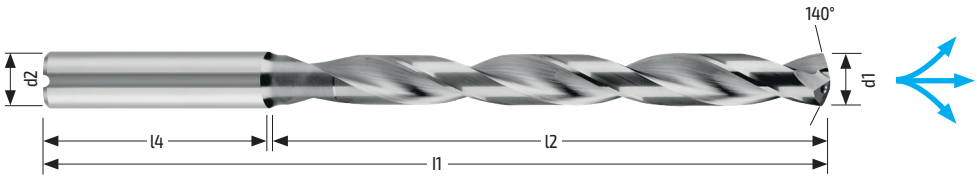
140°

Balinit® X-Pro	d1 m7	d2 h6	l2	l4	l1
HMX3051A142	14,2	16	83	48	133
HMX3051A145	14,5				
HMX3051A148	14,8				
HMX3051A150	15,0				
HMX3051A152	15,2				
HMX3051A155	15,5				
HMX3051A158	15,8				
HMX3051A160	16,0				
HMX3051A165	16,5	18	93	48	143
HMX3051A170	17,0				
HMX3051A175	17,5				
HMX3051A180	18,0				
HMX3051A185	18,5	20	101	50	153
HMX3051A190	19,0				
HMX3051A195	19,5				
HMX3051A200	20,0				

1 Acciaio Steel | 2 Ghise Cast Iron | 3 Acciai Temprati Hardened Steel | 4 Acciaio Inox Stainless Steel | 5 Titanio Titanium | 6 Leghe Leggere Light Alloys | 7 PH Duplex | 8 Superleghe Superalloys | 9 Compositi Composite Materials | 10 Grafite Graphite

3081A

Punta 8xD con fori
8xD drill with internal coolant



Silmax NORM

DIN 6535 HA (Standard)

1 2 4 5 7 8 9

140°

Balinit® X-Pro	d1 h8	d2 h6	l2	l4	l1
HMX3081A010	1,0	3	16	-	77
HMX3081A012	1,2	3	19		
HMX3081A015	1,5	3	24		
HMX3081A016	1,6	3	25		
HMX3081A018	1,8	3	28	-	84
HMX3081A020	2,0	3	32		
HMX3081A025	2,5	3	40	-	91
HMX3081A030	3,0	6	36	36	74
HMX3081A032	3,2				
HMX3081A033	3,3				
HMX3081A034	3,4				
HMX3081A035	3,5				
HMX3081A040	4,0	6	57	36	82
HMX3081A042	4,2				
HMX3081A043	4,3				
HMX3081A045	4,5				
HMX3081A048	4,8	6	57	36	95
HMX3081A050	5,0				
HMX3081A051	5,1				
HMX3081A055	5,5				
HMX3081A058	5,8				
HMX3081A060	6,0				
HMX3081A061	6,1	8	76	36	114
HMX3081A063	6,3				
HMX3081A065	6,5				
HMX3081A066	6,6				
HMX3081A068	6,8				
HMX3081A069	6,9				
HMX3081A070	7,0				
HMX3081A075	7,5				
HMX3081A078	7,8				
HMX3081A080	8,0				
HMX3081A085	8,5	10	96	40	138
HMX3081A087	8,7				
HMX3081A090	9,0				
HMX3081A093	9,3				
HMX3081A095	9,5				
HMX3081A098	9,8				
HMX3081A100	10,0				
HMX3081A103	10,3	12	115	45	162
HMX3081A105	10,5				
HMX3081A110	11,0				
HMX3081A114	11,4				
HMX3081A115	11,5				
HMX3081A119	11,9				
HMX3081A120	12,0				
HMX3081A125	12,5	14	134	45	181
HMX3081A130	13,0				
HMX3081A135	13,5				
HMX3081A140	14,0				
HMX3081A145	14,5	16	153	48	203
HMX3081A150	15,0				
HMX3081A160	16,0				

Punte per foratura manuale di pannelli CFRP e sandwich Titanio/Alluminio

Manual drill for CFRP panels and Titanium/Aluminium sandwiches

Caratteristiche Geometriche

Geometria frontale sviluppata in particolare per la foratura manuale. Garantisce un grado di finitura eccezionale eliminando i fenomeni di delaminazione. Utensile particolarmente indicato per la lavorazione dei materiali compositi a base di carbonio di difficile lavorabilità.

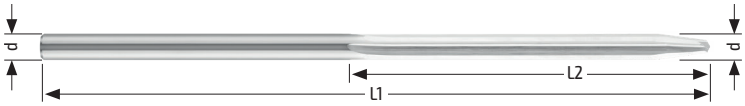
Geometrical Features

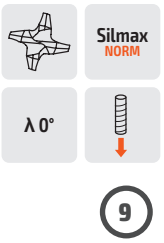
Front geometry specifically developed for manual drilling. It ensures an exceptional finishing grade, preventing delamination. A tool that is particularly suitable for machining carbon-based composite materials of difficult machinability.

780

Punte per foratura manuale di pannelli CFRP e sandwich Titanio/Alluminio

Manual drill for CFRP panels and Titanium/Aluminium sandwiches



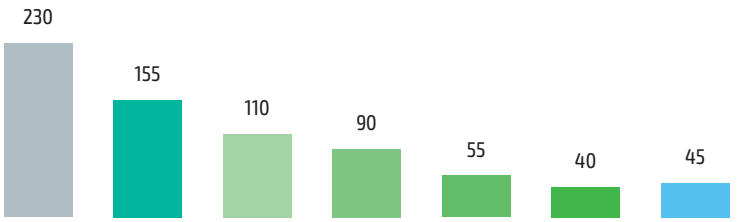


D h6	d h6	L	l2 ap	Z	Non rivestito Uncoated
2,00	2,00	100	50,0	4	HM0780020
2,48	2,48	100	50,0	4	HM0780024
3,00	3,00	100	50,0	4	HM0780030
3,17	3,17	100	50,0	4	HM0780031
4,00	4,00	100	50,0	4	HM0780040
4,21	4,21	100	50,0	4	HM0780042
4,82	4,82	100	50,0	4	HM0780048
5,05	5,05	100	50,0	4	HM0780050
5,53	5,53	100	50,0	4	HM0780055
6,00	6,00	100	50,0	4	HM0780060
6,35	6,35	100	50,0	4	HM0780063
6,60	6,60	100	50,0	4	HM0780066
7,00	7,00	100	50,0	4	HM0780070
7,92	7,92	100	50,0	4	HM0780079
8,00	8,00	100	50,0	4	HM0780080
8,63	8,63	100	50,0	4	HM0780086
9,00	9,00	100	50,0	4	HM0780090
10,00	10,00	100	50,0	4	HM0780100
12,00	12,00	100	50,0	4	HM0780120

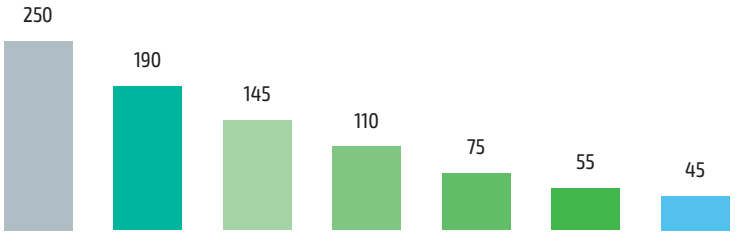
Notes

Parametri di lavoro / Working Parameters

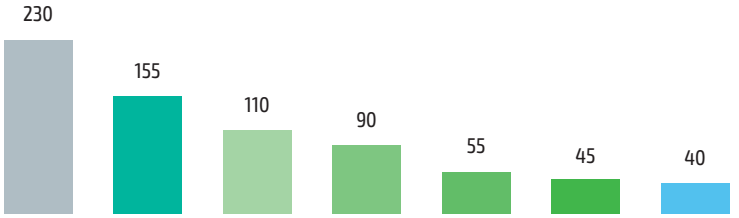
Vc[m/min]



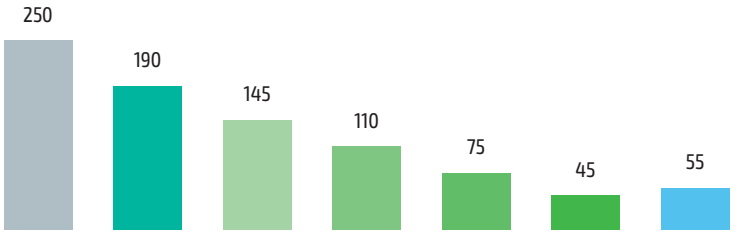
3030A



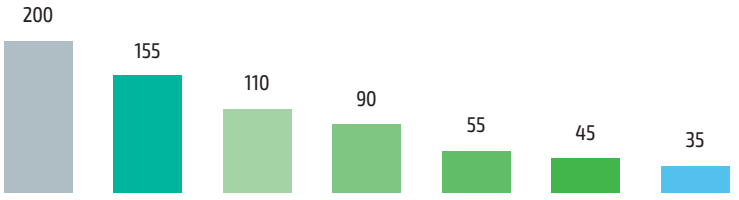
3031A



3050A



3051A

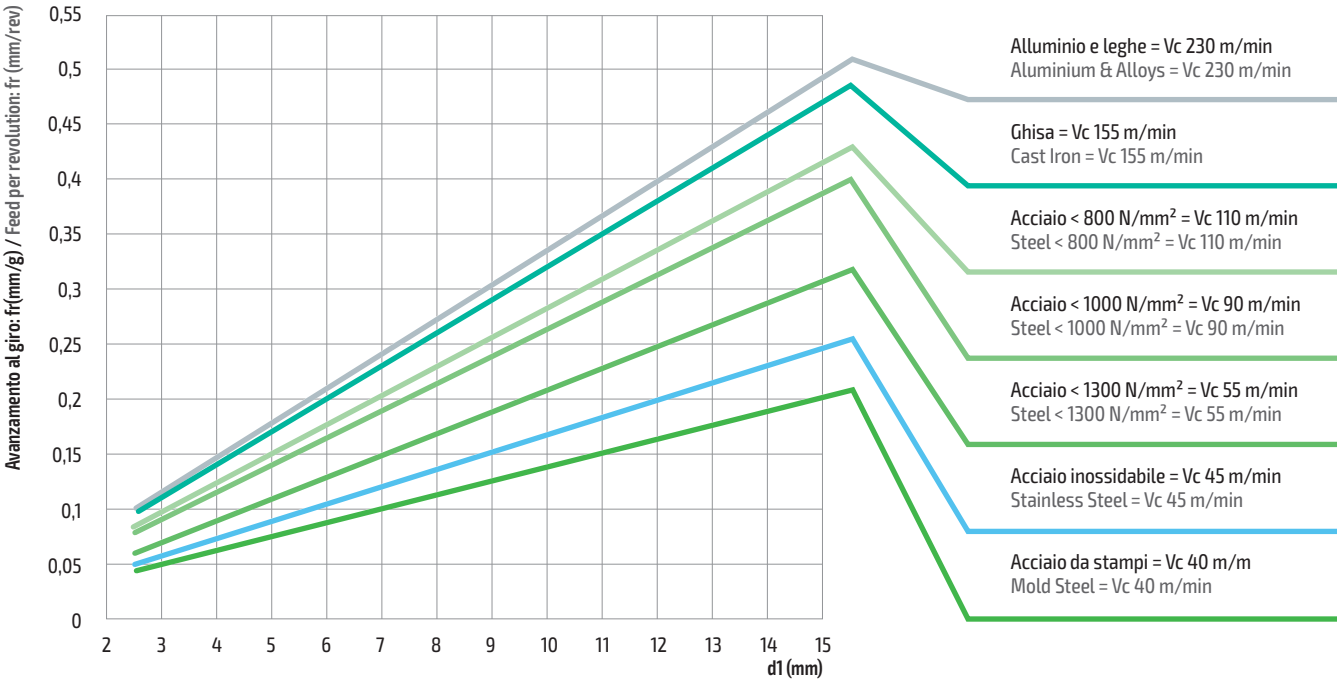


3081A

Notes

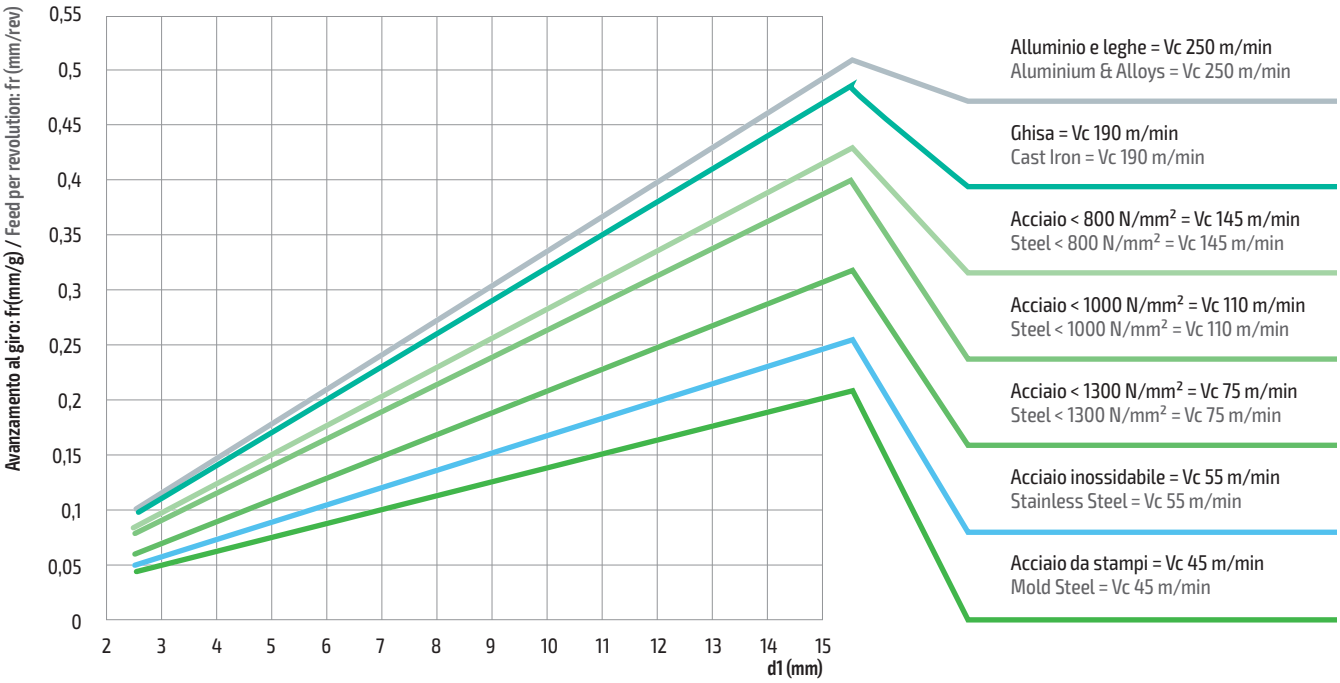
3030A

Parametri di lavoro / Working Parameters



3031A

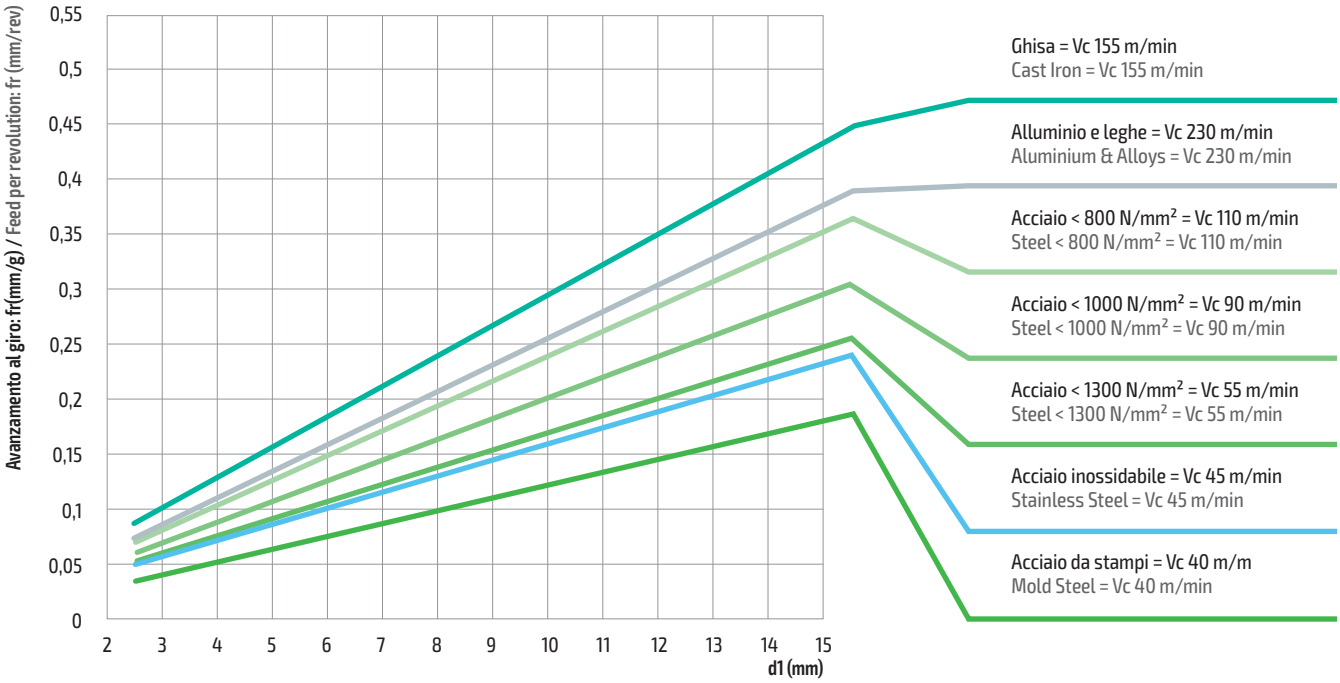
Parametri di lavoro / Working Parameters



1	2	3	4	5	6	7	8	9	10
Acciaio Steel	Ghise Cast Iron	Acciai Temprati Hardened Steel	Acciaio Inox Stainless Steel	Titanio Titanium	Leghe Leggere Light Alloys	PH Duplex	Superleghe Superalloys	Compositi Composite Materials	Grafite Graphite

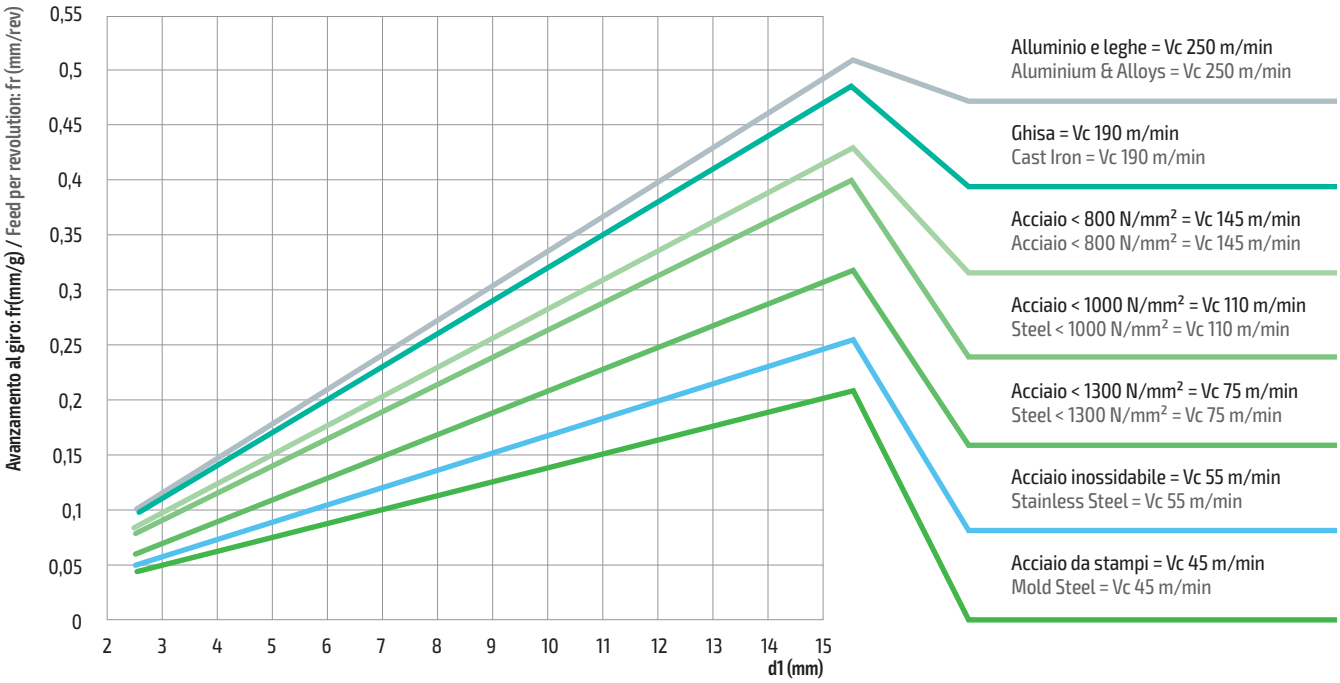
3050A

Parametri di lavoro / Working Parameters



3051A

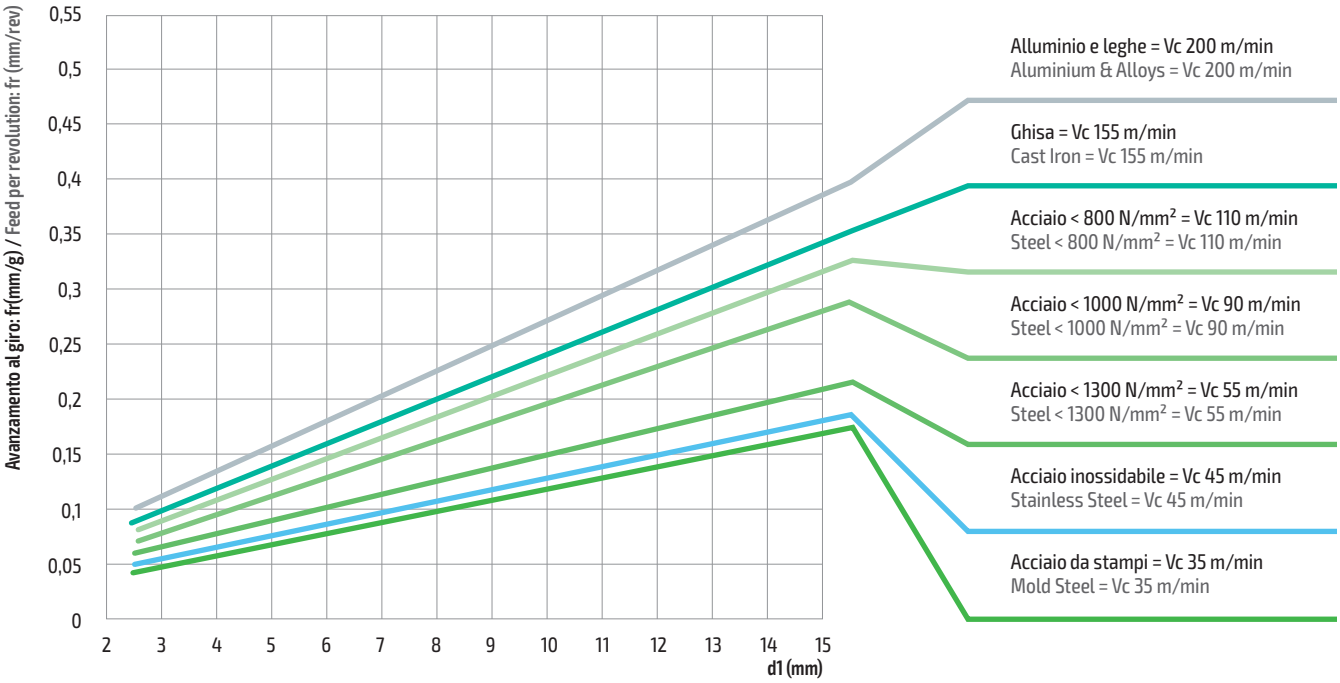
Parametri di lavoro / Working Parameters



Notes

3081A

Parametri di lavoro / Working Parameters

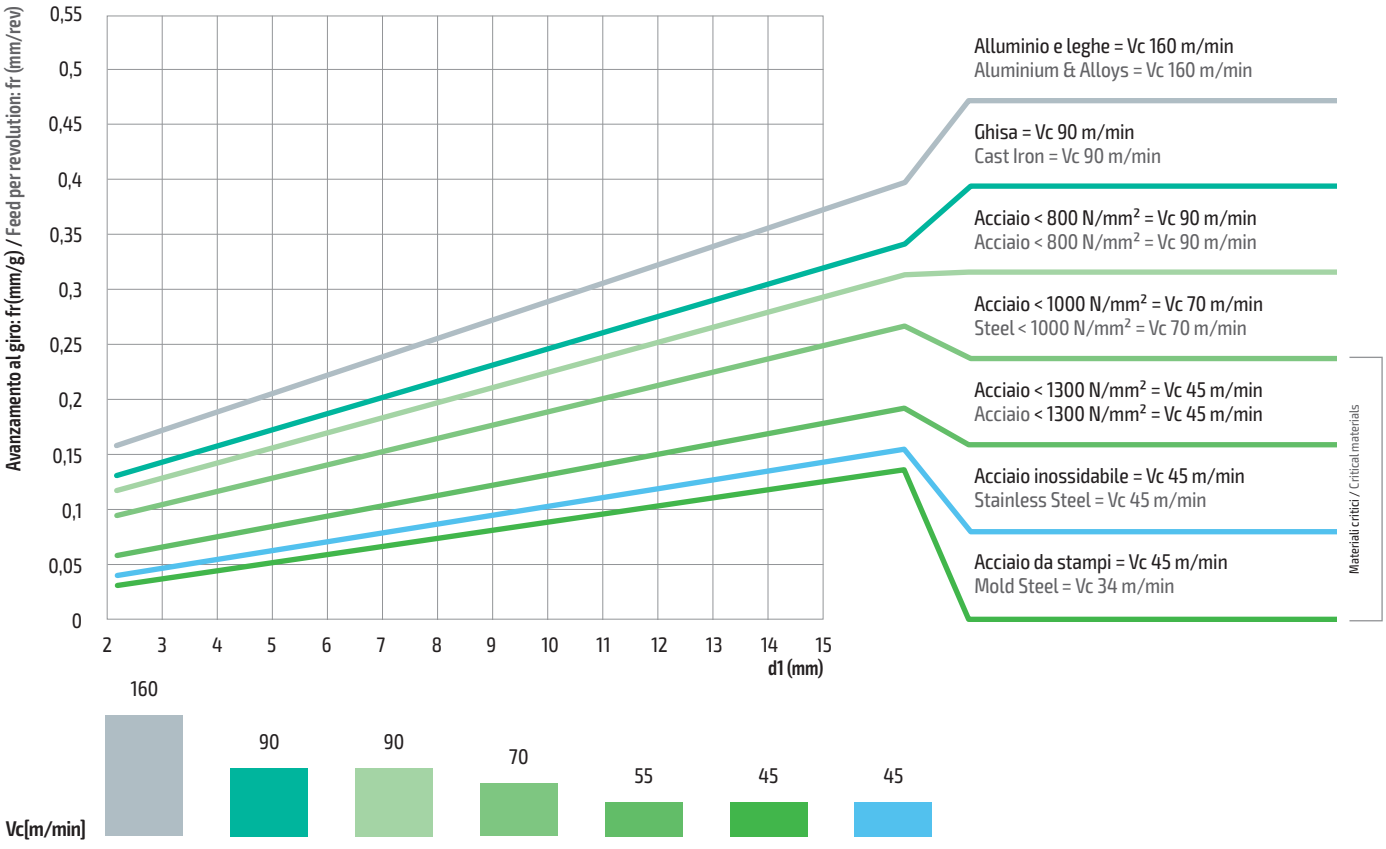


1	2	3	4	5	6	7	8	9	10
Acciaio Steel	Ghise Cast Iron	Acciai Temprati Hardened Steel	Acciaio Inox Stainless Steel	Titanio Titanium	Leghe Leggere Light Alloys	PH Duplex	Superleghe Superalloys	Compositi Composite Materials	Grafite Graphite

PUNTE A GRADINO
STEP DRILLS

Scelta dell'utensile / Choice of the tool

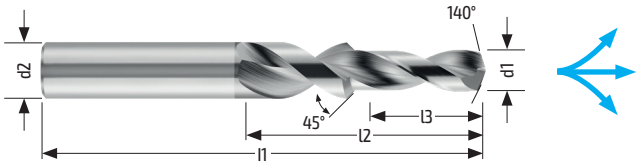
		P	d1 (max)	d1 (Standard Material)	d1 (* Critical Material)
ISO	M4	0,70	3,42	3,30	3,40
	M5	0,80	4,33	4,20	4,30
	M6	1,00	5,15	5,00	5,10
	M8	1,25	6,91	6,80	6,90
	M10	1,50	8,68	8,50	8,65
	M12	1,75	10,44	10,25	10,40
UNC	1/4	20,00	5,26	5,10	-
	3/8	16,00	8,15	7,90	-
	1/2	13,00	11,02	10,50	-



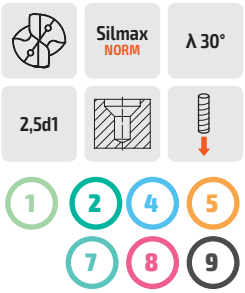
Notes

3825

Punta per prefori di maschiatura ad esecuzione dello smusso con fori di lubrificazione
Step drill for core drill sizes for taps with internal coolant



Con fori di lubrificazione / With internal coolant

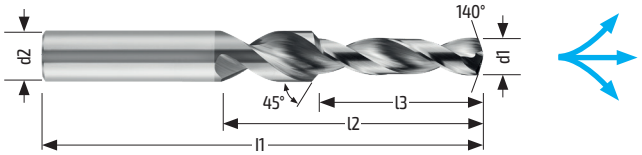


140°

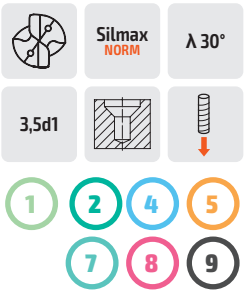
FIL ISO	FIL UNC	d1 m7	d2 h6	l1	l2	l3	Balinit® X-Pro
M4	-	3,30	6	64	23	10	HMX382510330
M4*	-	3,40	6	64	23	10	HMX382510340
M5	-	4,20	6	64	26	13	HMX382510420
M5*	-	4,30	6	64	26	13	HMX382510430
M6	-	5,00	8	74	32	15	HMX382510500
M6*	1/4-20	5,10	8	74	32	15	HMX382510510
M8	-	6,80	10	90	42	20	HMX382510680
M8*	-	6,90	10	90	42	20	HMX382510690
-	3/8-16	7,90	12	105	50	24	HMX382510790
M10	-	8,50	12	105	51	25	HMX382510850
M10*	-	8,65	12	105	51	25	HMX382510865
M12	-	10,25	14	107	60	30	HMX382511025
M12*	-	10,40	14	107	60	30	HMX382511040
-	1/2-13	10,50	14	120	62	32	HMX382511050

3835

Punta per prefori di maschiatura ad esecuzione dello smusso con fori di lubrificazione
Step drill for core drill sizes for taps with internal coolant



Con fori di lubrificazione / With internal coolant



140°

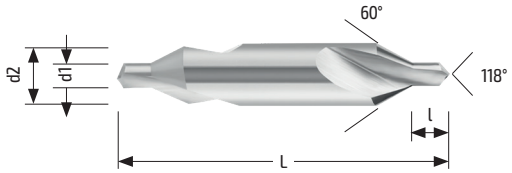
FIL ISO	FIL UNC	d1 m7	d2 h6	l1	l2	l3	Balinit® X-Pro
M4	-	3,30	6	64	27	14	HMX383510330
M4*	-	3,40	6	64	27	14	HMX383510340
M5	-	4,20	6	68	31	18	HMX383510420
M5*	-	4,30	6	68	31	18	HMX383510430
M6	-	5,00	8	78	38	21	HMX383510500
M6*	1/4-20	5,10	8	78	38	21	HMX383510510
M8	-	6,80	10	98	50	28	HMX383510680
M8*	-	6,90	10	98	50	28	HMX383510690
-	3/8 - 16	7,90	12	107	60	34	HMX383510790
M10	-	8,50	12	107	61	35	HMX383510850
M10*	-	8,65	12	107	61	35	HMX383510865
M12	-	10,25	14	120	72	42	HMX383511025
M12*	-	10,40	14	120	72	42	HMX383511040
-	1/2-13	10,50	14	127	75	45	HMX383511050

1 Acciaio Steel	2 Ghise Cast Iron	3 Acciai Temprati Hardened Steel	4 Acciaio Inox Stainless Steel	5 Titanio Titanium	6 Leghe Leggere Light Alloys	7 PH Duplex	8 Superleghe Superalloys	9 Compositi Composite Materials	10 Grafite Graphite

PUNTE A CENTRARE
CENTER DRILLS

351

Punta a centrare
Center drill



DIN 333A |  | Form A | λ 0°

1 2 4 5
6 7 8 9

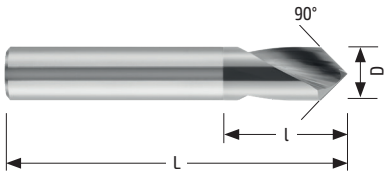
60°

d1 k12	d2 h6	L	l ap	Non rivestito Uncoated	Balinit Alcrona®
1,00	3,15	31	1,3-1,6	HM0351100	HMG351100
1,25	3,15	31	1,6-1,9	HM0351125	HMG351125
1,60	4,00	35	2,0-2,4	HM0351160	HMG351160
2,00	5,00	40	2,5-2,9	HM0351200	HMG351200
2,50	6,30	45	3,1-3,6	HM0351250	HMG351250
3,15	8,00	50	3,9-4,4	HM0351315	HMG351315
4,00	10,00	55	5,0-5,6	HM0351400	HMG351400
5,00	12,50	63	6,3-6,9	HM0351500	HMG351500

Notes

357

Punta a centrare
Center drill



ISO 10898 | λ 20°

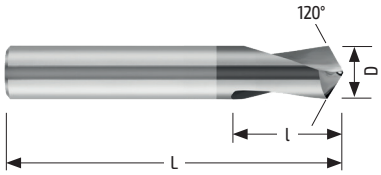
1 2 4 5 6 7 8 9

90°

D h6	L	l ap	Non rivestito Uncoated	Balinit Alcrona®
3,00	45	10,0	HM0357003	HMG357003
4,00	50	12,0	HM0357004	HMG357004
5,00	50	15,0	HM0357005	HMG357005
6,00	50	18,0	HM0357006	HMG357006
8,00	64	23,0	HM0357008	HMG357008
10,00	67	24,0	HM0357010	HMG357010
12,00	74	24,0	HM0357012	HMG357012
16,00	92	32,0	HM0357016	HMG357016

358

Punta a centrare
Center drill



ISO 10898 | λ 20°

1 2 4 5 6 7 8 9

120°

D h6	L	l ap	Non rivestito Uncoated	Balinit Alcrona®
3,00	45	10,0	HM0358003	HMG358003
4,00	50	12,0	HM0358004	HMG358004
5,00	50	15,0	HM0358005	HMG358005
6,00	50	18,0	HM0358006	HMG358006
8,00	64	23,0	HM0358008	HMG358008
10,00	67	24,0	HM0358010	HMG358010
12,00	74	24,0	HM0358012	HMG358012

1 **Acciaio** Steel
2 **Ghise** Cast Iron
3 **Acciai Temprati** Hardened Steel
4 **Acciaio Inox** Stainless Steel
5 **Titanio** Titanium
6 **Leghe Leggere** Light Alloys
7 **PH Duplex**
8 **Superleghe** Superalloys
9 **Compositi** Composite Materials
10 **Grafite** Graphite

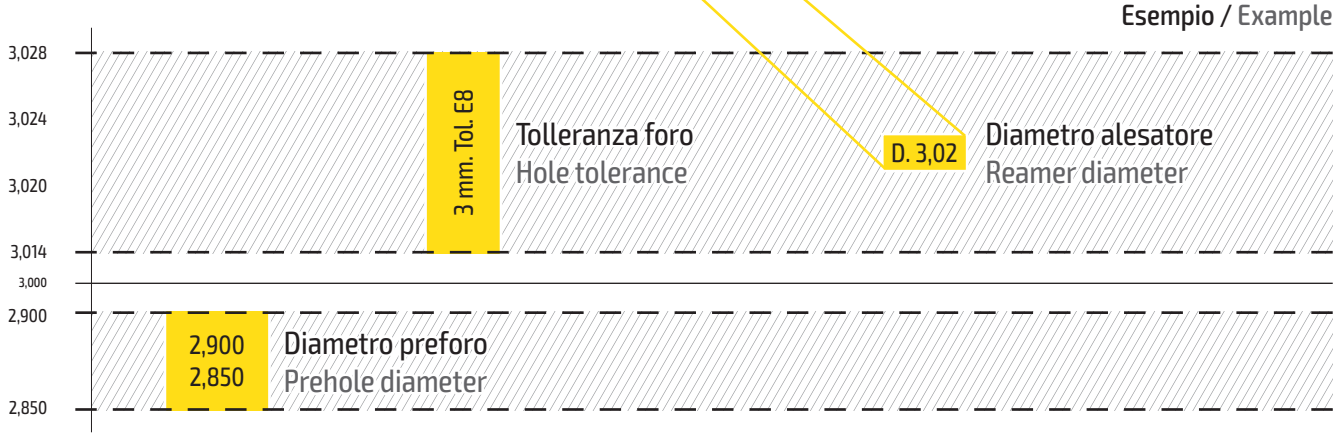
ALESATORI CENTESIMALI
REAMERS

503

Scelta dell'alesatore / Choice of the reamer

Toll.	D. 2 mm	D. 3 mm	D. 4 mm	D. 5 mm	D. 6 mm	D. 8 mm	D. 10 mm	D. 12 mm
D10	2,04	3,04	4,05	5,06	6,06	8,07	10,08	12,10
E8	2,02	3,02	4,03	5,03	6,03	8,03	10,03	12,04
E9	2,03	3,03	4,04	5,04	6,04	8,05	10,05	12,06
F7	2,01	3,01	4,01	5,01	6,01	8,02	10,02	12,02
F8	2,01	3,01	4,02	5,02	6,02	8,02	10,02	12,03
G7	-	-	-	-	-	8,01	10,01	12,01
H6	2,00	3,00	4,00	5,00	6,00	8,00	10,00	12,00
H7	-	-	-	-	-	-	-	-
H8	-	-	4,01	5,01	6,01	8,01	10,01	12,01
H9	2,01	3,01	4,02	5,02	6,02	8,02	10,02	12,03
M7	1,99	2,99	3,99	4,99	5,99	7,99	9,99	11,99
N7	1,99	2,99	3,99	4,99	5,99	7,98	9,98	11,98
P7	1,99	2,99	3,98	4,98	5,98	7,98	9,98	11,97
R7	1,98	2,98	3,98	4,98	5,98	7,98	9,98	11,97

Esempio / Example



	Vc m/min	20-25	12-18	10-15	7-12	6-10	25-30	40-60
		Acciaio / Steel <800 N/mm²	Acciaio / Steel <1000 N/mm²	Acciaio / Steel <1300 N/mm²	Acciaio inossidabile Stainless Steel	Superleghe Superalloys	Rame e leghe Copper & Alloys	Alluminio e leghe Aluminium & Alloys
f/giro f/rpm	D.2 mm	0,10	0,08	0,08	0,07	0,07	0,12	0,15
	D.6 mm	0,12	0,10	0,09	0,08	0,10	0,18	0,18
	D.10 mm	0,18	0,15	0,14	0,12	0,12	0,20	0,25
	D.16 mm	0,18	0,20	0,18	0,15	0,15	0,25	0,30

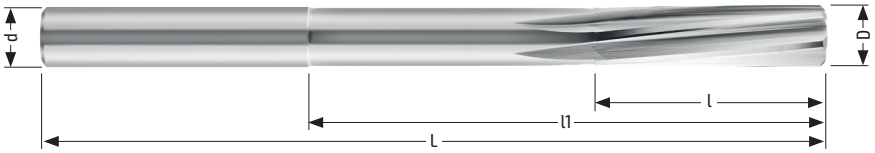
Notes

503

Alesatore centesimale
Reamer

DIN 212B

24h



D	Tolerance	d	l	L	l1	Z	Non rivestito Uncoated	Balinit® Alcrona
0,90 ÷ 0,99 (× 0,01 mm)	+0,004/+0	D	8	40	-	4	HM0503...	HMG503...
1,00 ÷ 1,50 (× 0,01 mm)	+0,004/+0	D	8	40	-	4	HM0503...	HMG503...
1,51 ÷ 1,90 (× 0,01 mm)	+0,004/+0	D	9	43	-	4	HM0503...	HMG503...
1,91 ÷ 2,12 (× 0,01 mm)	+0,004/+0	2,0	11	49	26	4	HM0503...	HMG503...
2,13 ÷ 2,36 (× 0,01 mm)	+0,004/+0	2,0	12	53	-	4	HM0503...	HMG503...
2,37 ÷ 2,48 (× 0,01 mm)	+0,004/+0	2,3	14	57	-	4	HM0503...	HMG503...
2,49 ÷ 2,65 (× 0,01 mm)	+0,004/+0	2,5	14	57	-	4	HM0503...	HMG503...
2,66 ÷ 2,96 (× 0,01 mm)	+0,004/+0	2,5	15	61	-	4	HM0503...	HMG503...
2,97 ÷ 3,35 (× 0,01 mm)	+0,004/+0	3,0	16	65	40	4	HM0503...	HMG503...
3,36 ÷ 3,75 (× 0,01 mm)	+0,004/+0	3,5	18	70	45	4	HM0503...	HMG503...
3,76 ÷ 4,02 (× 0,01 mm)	+0,004/+0	4,0	19	75	46	6	HM0503...	HMG503...
4,03 ÷ 4,25 (× 0,01 mm)	+0,004/+0	4,0	19	80	46	6	HM0503...	HMG503...
4,26 ÷ 4,52 (× 0,01 mm)	+0,004/+0	4,5	21	80	46	6	HM0503...	HMG503...
4,53 ÷ 4,75 (× 0,01 mm)	+0,004/+0	5,0	21	86	51	6	HM0503...	HMG503...
4,76 ÷ 5,02 (× 0,01 mm)	+0,004/+0	5,0	23	86	51	6	HM0503...	HMG503...
5,03 ÷ 5,52 (× 0,01 mm)	+0,004/+0	5,5	26	93	56	6	HM0503...	HMG503...
5,53 ÷ 6,00 (× 0,01 mm)	+0,004/+0	6,0	26	93	56	6	HM0503...	HMG503...
6,01 ÷ 6,52 (× 0,01 mm)	+0,005/+0	6,0	28	100	63	6	HM0503...	HMG503...
6,53 ÷ 6,70 (× 0,01 mm)	+0,005/+0	6,0	28	100	63	6	HM0503...	HMG503...
6,71 ÷ 7,02 (× 0,01 mm)	+0,005/+0	7,0	31	109	68	6	HM0503...	HMG503...
7,03 ÷ 7,50 (× 0,01 mm)	+0,005/+0	7,0	31	109	68	6	HM0503...	HMG503...
7,51 ÷ 8,02 (× 0,01 mm)	+0,005/+0	8,0	33	117	74	6	HM0503...	HMG503...
8,03 ÷ 8,50 (× 0,01 mm)	+0,005/+0	8,0	33	117	74	6	HM0503...	HMG503...
8,51 ÷ 9,02 (× 0,01 mm)	+0,005/+0	9,0	36	125	80	6	HM0503...	HMG503...
9,03 ÷ 9,50 (× 0,01 mm)	+0,005/+0	9,0	36	125	80	6	HM0503...	HMG503...
9,51 ÷ 10,02 (× 0,01 mm)	+0,005/+0	10,0	38	133	86	6	HM0503...	HMG503...
10,03 ÷ 10,60 (× 0,01 mm)	+0,005/+0	10,0	38	133	86	6	HM0503...	HMG503...
10,61 ÷ 11,47 (× 0,01 mm)	+0,005/+0	10,0	41	142	95	6	HM0503...	HMG503...
11,48 ÷ 12,02 (× 0,01 mm)	+0,005/+0	12,0	44	150	103	6	HM0503...	HMG503...
12,03 ÷ 12,47 (× 0,01 mm)	+0,005/+0	12,0	44	151	104	6	HM0503...	HMG503...

Come ordinare (esempio) How to order (example)	Rivestimento Coating	Codice Code	Diametro Diameter	Codice per ordine Code to place order
	HMG	503	0403 (= 4,03mm)	HMG5030403

1	2	3	4	5	6	7	8	9	10
Acciaio Steel	Ghise Cast Iron	Acciai Temprati Hardened Steel	Acciaio Inox Stainless Steel	Titanio Titanium	Leghe Leggere Light Alloys	PH Duplex	Superleghe Superalloys	Compositi Composite Materials	Grafite Graphite

SIL SERVICE

Riaffilatura e rigenerazione: da usato a nuovo

Silmax è in grado di riaffilare e/o rigenerare **come nuove** frese, punte e alesatori, nelle versioni normali e speciali, utilizzando **gli stessi impianti di produzione a 5 assi**.

Esecuzione perfetta

Esecuzione perfetta con la garanzia del produttore e collaudo effettuato su strumenti di controllo di alta precisione Zoller Genius e Walter Helicheck con emissione di certificato su richiesta.

Rivestimento PVD

Rivestimento PVD eseguito nel nostro centro di rivestimento interno in Lanzo Torinese con la tecnologia Balzers sia per HSS che HM come Alcrona, Futura, Alnova, Latuma e TiN.

Trattamento 4S

Trattamento 4S di super finitura superficiale del filo tagliente pre e post rivestimento, eseguito con impianto OTEC e verificato con strumento di misura Alicona.

Consegna rapida

Consegna rapida entro 10 giorni lavorativi dal ricevimento degli utensili per riaffilatura e rivestimento.

Per diametri non a catalogo consegna entro due settimane.

Re-sharpening and re-conditioning: from used to new.

Silmax can re-sharpen and/or re-condition **like new** standard and special end mills, drills and reamers **using the same 5-axis plants**.

Perfect execution

A perfect execution with the manufacturer's warranty and testing carried out with high-precision measurement instruments of Zoller Genius and Walter Helicheck, with issuing of certificate on request.

PVD Coating

PVD coating in our in-house coating centre in Lanzo Torinese is carried out using Balzers technology, such as Alcrona, Futura, Alnova, Latuma e TiN, both for HSS and HM tools.

4S Treatment

4S super-finishing surface treatment of cutting edge before and after the coating process, is carried out using an OTEC system and checked with an Alicona measuring instrument.

Fast delivery

Fast delivery within 10 working days from receipt of tools for resharpening and coating.

For diameters not included in the brochure, the delivery will be within 2 weeks.

QUALITY AS A STANDARD

Un'azienda italiana produttrice di utensili da taglio, con una lunga storia e una forte propensione all'innovazione grazie a moderni impianti e tecnologie di ultime generazoni.

Da oltre 50 anni Silmax si distingue per **precisione**, **passione** e **puntualità**

An Italian Company, producing cutting tools, with a long history and strong propensity to innovation thanks to modern and last generation technology.

Since 50 years Silmax is known for **precision**, **passion** and **punctuality**.

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