

DRILL LINE

DRILL LINE INDEX

Índice de brocas

	Code.	Picture	Description	Page	Ø Range (mm)	Front Angle	LxD	Norm	Shank Design	
SOLID CARBIDE	60.6003		DRILL 3XD	138	3 - 20	140°	3xD	DIN 6537K	HA	
	60.6005		DRILL 5XD	140	3 - 20	140°	5xD	DIN 6537L	HA	
	60.6803		DRILL 3XD INTERNAL COOLANT	144	3 - 20	140°	3xD	DIN 6537L	HA	
	60.6805		DRILL 5XD INTERNAL COOLANT	146	3 - 20	140°	5xD	DIN 6537L	HA	
	60.6808		DRILL 8XD INTERNAL COOLANT	148	3 - 20	140°	8xD	HELION	HA	
	60.6812		DRILL 12XD INTERNAL COOLANT	150	3 - 20	135°	12xD	HELION	HA	
	62.0010		SOLID CARBIDE TAP DESTROYING TOOL	152	M3 - M20	-	-	HELION	HA	
	62.6000		SOLID CARBIDE SPECIAL DRILL	153	2,6 - 14,10	-	3xD	DIN 6537K	HA	
	67.6885		SOLID CARBIDE DRILL REAMER 5XD	154	5,98 - 20	140°	5xD	HELION	HA	
	HSS	11.1360		HSSCO DRILL DIN 1897	155	1 - 14	118°	-	DIN 1897	HA
11.2360			HSSCO DRILL DIN 338	158	1 - 14	118°	-	DIN 338	HA	
10.2000			HSS DRILL DIN 338	160	1 - 16	118°	-	DIN 338	HA	
12.2105			HSS DRILL DIN 338	162	1 - 13	118°	-	DIN 338	HA	
10.5690			HSSCO SPOTTING DRILL · NC 90°	165	3 - 20	90°	-	HELION	HB	
10.5612			HSSCO SPOTTING DRILL · NC 120°	166	3 - 20	120°	-	HELION	HB	
10.5510			HSS CENTER DRILL	167	0,5 - 12,5	118°	-	HELION	HA	
10.5514			HSS CENTER DRILL XTRA LONG	168	2 - 3,15	118°	-	HELION	HA	
BOX		BOX SC4200	 NEW	BOX SOLID CARBIDE TDS UNISSET	143	40.1060 M4-12 60.6005 Ø3,3 - 10,2 21.2300 Ø6,3 y 16,5				HA
		BOX HS4100	 NEW	BOX HSS TDS UNISSET	164	40.1060 M3-10 12.2105 Ø2,5 - 8,5 21.0300 Ø6,3 y 12,4				HA

● First choice ○ Suitable

Coat.	Internal Coolant	Tolerance	600 1200 N/mm ²	HRC	Stainless M	Cast Iron K	Non Ferrous N	Super Alloy S	UNI	HSC	HHC	HPC
									Universal	High Speed Cutting	High Hard Cutting	High Performance Cutting
DRILLANT		m7	●	55	●	●	○	○	●	●		●
DRILLANT		m7	●	55	●	●	○	○	●	●		●
DRILLANT	●	m7	●	55	●	●	○	○	●	●		●
DRILLANT	●	m7	●	55	●	●	○	○	●	●		●
DRILLANT	●	m7	●	55	●	●	○	○	●	●		●
DRILLANT	●	h7	●	55	●	●	○	○	●	●		●
TIN Up		-		65					●			
RACER		-		55 - 65							●	●
RACER	●	D1 (H7)	●	55	●	●		○	●			●
TIN Up		h8	●		●	●	○	○	●			●
TIN Up		h8	●		●	●	○	○	●			
BLACK HVA		h8	●		○	●	○	○	●			
TIN Up		h8	●		○	●	○	○	●			
RACER		h6	●		●	●	●	●	●			
RACER		h6	●		●	●	●	●	●			
BRIGHT		-	●		●	●	●	●	●			
BRIGHT		-	●		●	●	●	●	●			
SC	HSS-E	HSS							●			
HSS	HSS-E								●			

60.6003

SOLID CARBIDE DRILL 3xD

Broca metal duro 3xD

SC

m7
TOLERANCE

3XD

140°
DRILLANT

600
1200
N/mm²

55
HRC

INOX

GG(G)

ALU
NE

PLASTIC

GFK
CFK

TITAN
INCONEL

UNI

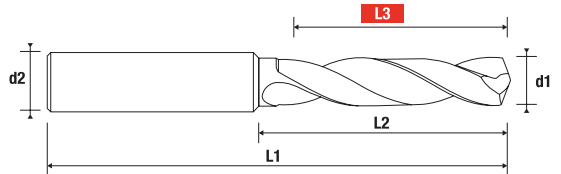


HA

HSC

HPC

DIN
6537K



Cod.	d1	d2	L1	L2	L3
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6060030310	3,10	6	62	20	14
6060030320	3,20	6	62	20	14
6060030330	3,30	6	62	20	14
6060030340	3,40	6	62	20	14
6060030350	3,50	6	62	20	14
6060030360	3,60	6	62	20	14
6060030370	3,70	6	62	20	14
6060030380	3,80	6	66	24	17
6060030390	3,90	6	66	24	17
6060030400	4,00	6	66	24	17
6060030410	4,10	6	66	24	17
6060030420	4,20	6	66	24	17
6060030430	4,30	6	66	24	17
6060030440	4,40	6	66	24	17
6060030450	4,50	6	66	24	17
6060030460	4,60	6	66	24	17
6060030470	4,70	6	66	24	17
6060030480	4,80	6	66	28	20
6060030490	4,90	6	66	28	20
6060030500	5,00	6	66	28	20
6060030510	5,10	6	66	28	20
6060030520	5,20	6	66	28	20
6060030530	5,30	6	66	28	20

Cod.	d1	d2	L1	L2	L3
6060030540	5,40	6	66	28	20
6060030550	5,50	6	66	28	20
6060030560	5,60	6	66	28	20
6060030570	5,70	6	66	28	20
6060030580	5,80	6	66	28	20
6060030590	5,90	6	66	28	20
6060030600	6,00	6	66	28	20
6060030610	6,10	8	79	34	25
6060030620	6,20	8	79	34	25
6060030630	6,30	8	79	34	25
6060030640	6,40	8	79	34	25
6060030650	6,50	8	79	34	25
6060030660	6,60	8	79	34	25
6060030670	6,70	8	79	34	25
6060030680	6,80	8	79	34	25
6060030690	6,90	8	79	34	25
6060030700	7,00	8	79	34	25
6060030710	7,10	8	79	41	31
6060030720	7,20	8	79	41	31
6060030730	7,30	8	79	41	31
6060030740	7,40	8	79	41	31
6060030750	7,50	8	79	41	31
6060030760	7,60	8	79	41	31
6060030770	7,70	8	79	41	31

Cod.	d1	d2	L1	L2	L3
6060030780	7,80	8	79	41	31
6060030790	7,90	8	79	41	31
6060030800	8,00	8	79	41	31
6060030810	8,10	10	89	47	36
6060030820	8,20	10	89	47	36
6060030830	8,30	10	89	47	36
6060030840	8,40	10	89	47	36
6060030850	8,50	10	89	47	36
6060030860	8,60	10	89	47	36
6060030870	8,70	10	89	47	36
6060030880	8,80	10	89	47	36
6060030890	8,90	10	89	47	36
6060030900	9,00	10	89	47	36
6060030910	9,10	10	89	47	36
6060030920	9,20	10	89	47	36
6060030930	9,30	10	89	47	36
6060030940	9,40	10	89	47	36
6060030950	9,50	10	89	47	36
6060030960	9,60	10	89	47	36
6060030970	9,70	10	89	47	36
6060030980	9,80	10	89	47	36
6060030990	9,90	10	89	47	36
6060031000	10,00	10	89	47	36
6060031010	10,10	12	102	55	42
6060031020	10,20	12	102	55	42
6060031030	10,30	12	102	55	42
6060031040	10,40	12	102	55	42
6060031050	10,50	12	102	55	42
6060031060	10,60	12	102	55	42
6060031070	10,70	12	102	55	42
6060031080	10,80	12	102	55	42
6060031090	10,90	12	102	55	42
6060031100	11,00	12	102	55	42
6060031110	11,10	12	102	55	42
6060031120	11,20	12	102	55	42
6060031130	11,30	12	102	55	42
6060031140	11,40	12	102	55	42
6060031150	11,50	12	102	55	42

Cod.	d1	d2	L1	L2	L3
6060031160	11,60	12	102	55	42
6060031170	11,70	12	102	55	42
6060031180	11,80	12	102	55	42
6060031190	11,90	12	102	55	42
6060031200	12,00	12	102	55	42
6060031210	12,10	14	107	60	46
6060031220	12,20	14	107	60	46
6060031230	12,30	14	107	60	46
6060031240	12,40	14	107	60	46
6060031250	12,50	14	107	60	46
6060031260	12,60	14	107	60	46
6060031270	12,70	14	107	60	46
6060031280	12,80	14	107	60	46
6060031290	12,90	14	107	60	46
6060031300	13,00	14	107	60	46
6060031310	13,10	14	107	60	46
6060031320	13,20	14	107	60	46
6060031330	13,30	14	107	60	46
6060031340	13,40	14	107	60	46
6060031350	13,50	14	107	60	46
6060031360	13,60	14	107	60	46
6060031370	13,70	14	107	60	46
6060031380	13,80	14	107	60	46
6060031390	13,90	14	107	60	46
6060031400	14,00	14	107	60	46
6060031410	14,10	16	115	65	50
6060031420	14,20	16	115	65	50
6060031430	14,30	16	115	65	50
6060031440	14,40	16	115	65	50
6060031450	14,50	16	115	65	50
6060031460	14,60	16	115	65	50
6060031470	14,70	16	115	65	50
6060031480	14,80	16	115	65	50
6060031490	14,90	16	115	65	50
6060031500	15,00	16	115	65	50
6060031510	15,10	16	115	65	50
6060031520	15,20	16	115	65	50
6060031530	15,30	16	115	65	50

Cod.	d1	d2	L1	L2	L3
6060031540	15,40	16	115	65	50
6060031550	15,50	16	115	65	50
6060031560	15,60	16	115	65	50
6060031570	15,70	16	115	65	50
6060031580	15,80	16	115	65	50
6060031590	15,90	16	115	65	50
6060031600	16,00	16	115	65	50
6060031650	16,50	18	123	73	56
6060031700	17,00	18	123	73	56
6060031750	17,50	18	123	73	56
6060031800	18,00	18	123	73	56
6060031850	18,50	20	131	79	61
6060031900	19,00	20	131	79	61
6060031950	19,50	20	131	79	61
6060032000	20,00	20	131	79	61



C. CONDITIONS



60.6005

SOLID CARBIDE DRILL 5XD

Broca metal duro 5xD

SC

m7
TOLERANCE

5XD



DRILLANT

600
1200
N/mm²

55
HRC

INOX

GG(G)

ALU
NE

PLASTIC

GFK
CFK

TITAN
INCONEL

UNI

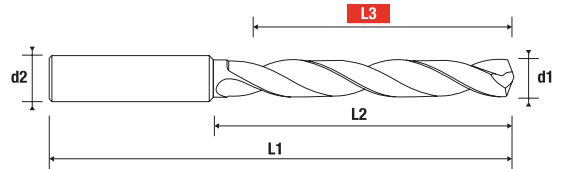


HA

HSC

HPC

DIN
6537L



Helion

Cod.	d1	d2	L1	L2	L3
6060050300	3,00	6	66	28	20
6060050310	3,10	6	66	28	20
6060050320	3,20	6	66	28	20
6060050330	3,30	6	66	28	20
6060050340	3,40	6	66	28	20
6060050350	3,50	6	66	28	20
6060050360	3,60	6	66	28	20
6060050370	3,70	6	66	28	20
6060050380	3,80	6	74	36	27
6060050390	3,90	6	74	36	27
6060050400	4,00	6	74	36	27
6060050410	4,10	6	74	36	27
6060050420	4,20	6	74	36	27
6060050430	4,30	6	74	36	27
6060050440	4,40	6	74	36	27
6060050450	4,50	6	74	36	27
6060050460	4,60	6	74	36	27
6060050465	4,65	6	74	36	27
6060050470	4,70	6	74	36	27
6060050480	4,80	6	82	44	33
6060050490	4,90	6	82	44	33
6060050500	5,00	6	82	44	33
6060050510	5,10	6	82	44	33
6060050520	5,20	6	82	44	33

Cod.	d1	d2	L1	L2	L3
6060050530	5,30	6	82	44	33
6060050540	5,40	6	82	44	33
6060050550	5,50	6	82	44	33
6060050555	5,55	6	82	44	33
6060050560	5,60	6	82	44	33
6060050570	5,70	6	82	44	33
6060050580	5,80	6	82	44	33
6060050590	5,90	6	82	44	33
6060050600	6,00	6	82	44	33
6060050610	6,10	8	91	53	40
6060050620	6,20	8	91	53	40
6060050630	6,30	8	91	53	40
6060050640	6,40	8	91	53	40
6060050650	6,50	8	91	53	40
6060050660	6,60	8	91	53	40
6060050670	6,70	8	91	53	40
6060050680	6,80	8	91	53	40
6060050690	6,90	8	91	53	40
6060050700	7,00	8	91	53	40
6060050710	7,10	8	91	53	40
6060050720	7,20	8	91	53	40
6060050730	7,30	8	91	53	40
6060050740	7,40	8	91	53	40
6060050750	7,50	8	91	53	40

Cod.	d1	d2	L1	L2	L3
6060050760	7,60	8	91	53	40
6060050770	7,70	8	91	53	40
6060050780	7,80	8	91	53	40
6060050790	7,90	8	91	53	40
6060050800	8,00	8	91	53	40
6060050810	8,10	10	103	61	47
6060050820	8,20	10	103	61	47
6060050830	8,30	10	103	61	47
6060050840	8,40	10	103	61	47
6060050850	8,50	10	103	61	47
6060050860	8,60	10	103	61	47
6060050870	8,70	10	103	61	47
6060050880	8,80	10	103	61	47
6060050890	8,90	10	103	61	47
6060050900	9,00	10	103	61	47
6060050910	9,10	10	103	61	47
6060050920	9,20	10	103	61	47
6060050930	9,30	10	103	61	47
6060050940	9,40	10	103	61	47
6060050950	9,50	10	103	61	47
6060050960	9,60	10	103	61	47
6060050970	9,70	10	103	61	47
6060050980	9,80	10	103	61	47
6060050990	9,90	10	103	61	47
6060051000	10,00	10	103	61	47
6060051010	10,10	12	118	71	55
6060051020	10,20	12	118	71	55
6060051030	10,30	12	118	71	55
6060051040	10,40	12	118	71	55
6060051050	10,50	12	118	71	55
6060051060	10,60	12	118	71	55
6060051070	10,70	12	118	71	55
6060051080	10,80	12	118	71	55
6060051090	10,90	12	118	71	55
6060051100	11,00	12	118	71	55
6060051110	11,10	12	118	71	55

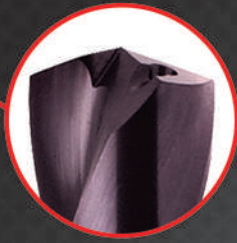
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6060051120	11,20	12	118	71	55
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6060051160	11,60	12	118	71	55
6060051170	11,70	12	118	71	55
6060051180	11,80	12	118	71	55
6060051190	11,90	12	118	71	55
6060051200	12,00	12	118	71	55
6060051210	12,10	14	124	77	60
6060051220	12,20	14	124	77	60
6060051240	12,40	14	124	77	60
6060051250	12,50	14	124	77	60
6060051260	12,60	14	124	77	60
6060051270	12,70	14	124	77	60
6060051300	13,00	14	124	77	60
6060051320	13,20	14	124	77	60
6060051330	13,30	14	124	77	60
6060051350	13,50	14	124	77	60
6060051370	13,70	14	124	77	60
6060051380	13,80	14	124	77	60
6060051400	14,00	14	124	77	60
6060051410	14,10	16	133	83	64
6060051420	14,20	16	133	83	64
6060051430	14,30	16	133	83	64
6060051440	14,40	16	133	83	64
6060051450	14,50	16	133	83	64
6060051470	14,70	16	133	83	64
6060051500	15,00	16	133	83	64
6060051510	15,10	16	133	83	64
6060051520	15,20	16	133	83	64
6060051550	15,50	16	133	83	64
6060051560	15,60	16	133	83	64
6060051570	15,70	16	133	83	64
6060051580	15,80	16	133	83	64
6060051600	16,00	16	133	83	64

Cod.	d1	d2	L1	L2	L3
6060051650	16,50	18	143	93	72
6060051700	17,00	18	143	93	72
6060051750	17,50	18	143	93	72
6060051800	18,00	18	143	93	72
6060051850	18,50	20	153	101	79
6060051900	19,00	20	153	101	79
6060051950	19,50	20	153	101	79
6060052000	20,00	20	153	101	79



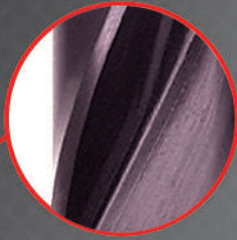
C. CONDITIONS





140° point angle
universally usable

Drillant coating with
lower friction coefficient



Optimum chip evacuation
through round flute profile
and polished flutes technology

Improved solid carbide grain
for more mechanical stability



Internal coolant holes to
maximize chip flow

Helion

60.6805

MULTI PURPOSE TOOL
HIGH PRODUCTIVITY
MORE EFFICIENCY

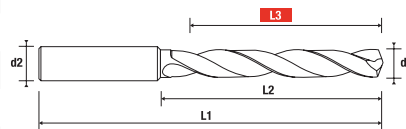
BOX SOLID CARBIDE TDS UNISSET

Juego de avellanadores y machos HSS con brocas de metal duro

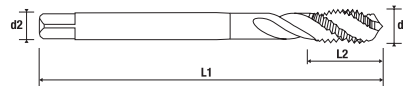


NEW PRODUCT

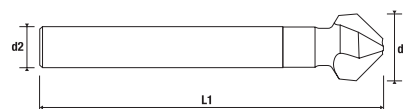
Cod.	d1	d2	L1	L2	L3
6060050330	3,30	6	66	28	20
6060050420	4,20	6	74	36	27
6060050500	5,00	6	82	44	33
6060050680	6,80	8	91	53	40
6060050850	8,50	10	103	61	47
6060051020	10,20	12	118	71	55



Cod.	M	d1	P	d2	L1	L2
401060M04	M4	4	0,70	4,50	63	8
401060M05	M5	5	0,80	6,00	70	9
401060M06	M6	6	1,00	6,00	80	11
401060M08	M8	8	1,25	8,00	90	14
401060M10	M10	10	1,50	10,00	100	16
401066M12	M12	12	1,75	9,00	110	19



Cod.	d1	d2	L1
2123000630	6,30	5	45
2123001650	16,50	10	60



BOX SC4200

SC

m7
TOLERANCE

DRILLANT

5XD



HSS-E

6H
TOLERANCE

BLACK HVA

DIN 371

HSS

90°

RACER

UNI

HA



60.6803

SOLID CARBIDE DRILL 3XD INTERNAL COOLANT

Broca metal duro 3xD con refrigeración interna

SC

m7
TOLERANCE

3XD



DRILLANT
600
1200
N/mm²

55
HRC

INOX

GG(G)
ALU
NE

TITAN
INCONELL

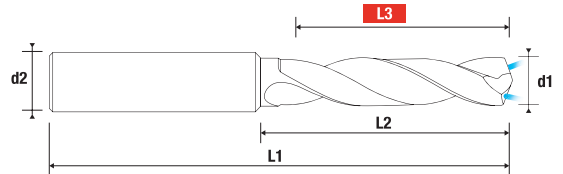
UNI

HSC

HPC

HA

DIN
6537K



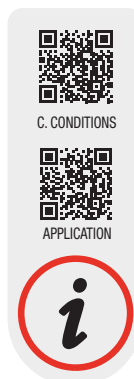
Cod.	d1	d2	L1	L2	L3
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6068030310	3,10	6	62	20	14
6068030320	3,20	6	62	20	14
6068030330	3,30	6	62	20	14
6068030340	3,40	6	62	20	14
6068030350	3,50	6	62	20	14
6068030360	3,60	6	62	20	14
6068030370	3,70	6	62	20	14
6068030380	3,80	6	66	24	17
6068030390	3,90	6	66	24	17
6068030400	4,00	6	66	24	17
6068030410	4,10	6	66	24	17
6068030420	4,20	6	66	24	17
6068030430	4,30	6	66	24	17
6068030440	4,40	6	66	24	17
6068030450	4,50	6	66	24	17
6068030460	4,60	6	66	24	17
6068030465	4,65	6	66	24	17
6068030470	4,70	6	66	24	17
6068030480	4,80	6	66	28	20
6068030490	4,90	6	66	28	20
6068030500	5,00	6	66	28	20
6068030510	5,10	6	66	28	20
6068030520	5,20	6	66	28	20
6068030530	5,30	6	66	28	20
6068030540	5,40	6	66	28	20

Cod.	d1	d2	L1	L2	L3
6068030550	5,50	6	66	28	20
6068030560	5,60	6	66	28	20
6068030570	5,70	6	66	28	20
6068030580	5,80	6	66	28	20
6068030590	5,90	6	66	28	20
6068030600	6,00	6	66	28	20
6068030610	6,10	8	79	34	25
6068030620	6,20	8	79	34	25
6068030630	6,30	8	79	34	25
6068030640	6,40	8	79	34	25
6068030650	6,50	8	79	34	25
6068030660	6,60	8	79	34	25
6068030670	6,70	8	79	34	25
6068030680	6,80	8	79	34	25
6068030690	6,90	8	79	34	25
6068030700	7,00	8	79	34	25
6068030710	7,10	8	79	41	31
6068030720	7,20	8	79	41	31
6068030730	7,30	8	79	41	31
6068030740	7,40	8	79	41	31
6068030750	7,50	8	79	41	31
6068030760	7,60	8	79	41	31
6068030770	7,70	8	79	41	31
6068030780	7,80	8	79	41	31
6068030790	7,90	8	79	41	31
6068030800	8,00	8	79	41	31

Cod.	d1	d2	L1	L2	L3
6068030810	8,10	10	89	47	36
6068030820	8,20	10	89	47	36
6068030830	8,30	10	89	47	36
6068030840	8,40	10	89	47	36
6068030850	8,50	10	89	47	36
6068030860	8,60	10	89	47	36
6068030870	8,70	10	89	47	36
6068030880	8,80	10	89	47	36
6068030890	8,90	10	89	47	36
6068030900	9,00	10	89	47	36
6068030910	9,10	10	89	47	36
6068030920	9,20	10	89	47	36
6068030930	9,30	10	89	47	36
6068030940	9,40	10	89	47	36
6068030950	9,50	10	89	47	36
6068030960	9,60	10	89	47	36
6068030970	9,70	10	89	47	36
6068030980	9,80	10	89	47	36
6068030990	9,90	10	89	47	36
6068031000	10,00	10	89	47	36
6068031010	10,10	12	102	55	42
6068031020	10,20	12	102	55	42
6068031030	10,30	12	102	55	42
6068031040	10,40	12	102	55	42
6068031050	10,50	12	102	55	42
6068031060	10,60	12	102	55	42
6068031070	10,70	12	102	55	42
6068031080	10,80	12	102	55	42
6068031090	10,90	12	102	55	42
6068031100	11,00	12	102	55	42
6068031110	11,10	12	102	55	42
6068031120	11,20	12	102	55	42
6068031130	11,30	12	102	55	42
6068031140	11,40	12	102	55	42
6068031150	11,50	12	102	55	42
6068031160	11,60	12	102	55	42
6068031170	11,70	12	102	55	42
6068031180	11,80	12	102	55	42
6068031190	11,90	12	102	55	42
6068031200	12,00	12	102	55	42

Cod.	d1	d2	L1	L2	L3
6068031210	12,10	14	107	60	46
6068031220	12,20	14	107	60	46
6068031230	12,30	14	107	60	46
6068031240	12,40	14	107	60	46
6068031250	12,50	14	107	60	46
6068031260	12,60	14	107	60	46
6068031270	12,70	14	107	60	46
6068031280	12,80	14	107	60	46
6068031290	12,90	14	107	60	46
6068031300	13,00	14	107	60	46
6068031310	13,10	14	107	60	46
6068031320	13,20	14	107	60	46
6068031330	13,30	14	107	60	46
6068031340	13,40	14	107	60	46
6068031350	13,50	14	107	60	46
6068031360	13,60	14	107	60	46
6068031370	13,70	14	107	60	46
6068031380	13,80	14	107	60	46
6068031390	13,90	14	107	60	46
6068031400	14,00	14	107	60	46
6068031410	14,10	16	115	65	50
6068031420	14,20	16	115	65	50
6068031430	14,30	16	115	65	50
6068031440	14,40	16	115	65	50
6068031450	14,50	16	115	65	50
6068031460	14,60	16	115	65	50
6068031470	14,70	16	115	65	50
6068031480	14,80	16	115	65	50
6068031490	14,90	16	115	65	50
6068031500	15,00	16	115	65	50
6068031510	15,10	16	115	65	50
6068031520	15,20	16	115	65	50
6068031530	15,30	16	115	65	50
6068031540	15,40	16	115	65	50
6068031550	15,50	16	115	65	50
6068031560	15,60	16	115	65	50
6068031570	15,70	16	115	65	50
6068031580	15,80	16	115	65	50
6068031590	15,90	16	115	65	50
6068031600	16,00	16	115	65	50

Cod.	d1	d2	L1	L2	L3
6068031610	16,10	18	115	73	56
6068031620	16,20	18	115	73	56
6068031650	16,50	18	123	73	56
6068031690	16,90	18	123	73	56
6068031700	17,00	18	123	73	56
6068031720	17,20	18	123	73	56
6068031730	17,30	18	123	73	56
6068031740	17,40	18	123	73	56
6068031750	17,50	18	123	73	56
6068031760	17,60	18	123	73	56
6068031770	17,70	18	123	73	56
6068031790	17,90	18	123	73	56
6068031800	18,00	18	123	73	56
6068031830	18,30	20	123	79	61
6068031850	18,50	20	131	79	61
6068031890	18,90	20	131	79	61
6068031900	19,00	20	131	79	61
6068031930	19,30	20	131	79	61
6068031950	19,50	20	131	79	61
6068031990	19,90	20	131	79	61
6068032000	20,00	20	131	79	61



60.6805

SOLID CARBIDE DRILL 5XD INTERNAL COOLANT

Broca metal duro 5xD con refrigeración interior

SC

m7
TOLERANCE

5XD

140°

DRILLANT
600
1200
N/mm²

55
HRC

INOX

GG(G)

**ALU
NE**

**TITAN
INCONELL**

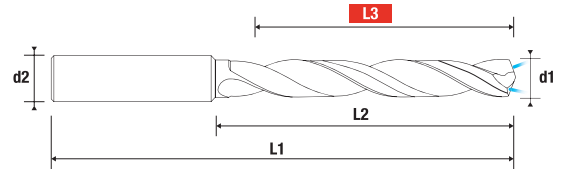
UNI

HSC

HPC

HA

**DIN
6537L**



Cod.	d1	d2	L1	L2	L3
6068050300	3,00	6	66	28	20
6068050310	3,10	6	66	28	20
6068050320	3,20	6	66	28	20
6068050330	3,30	6	66	28	20
6068050340	3,40	6	66	28	20
6068050350	3,50	6	66	28	20
6068050360	3,60	6	66	28	20
6068050370	3,70	6	66	28	20
6068050380	3,80	6	74	36	27
6068050390	3,90	6	74	36	27
6068050400	4,00	6	74	36	27
6068050410	4,10	6	74	36	27
6068050420	4,20	6	74	36	27
6068050430	4,30	6	74	36	27
6068050440	4,40	6	74	36	27
6068050450	4,50	6	74	36	27
6068050460	4,60	6	74	36	27
6068050465	4,65	6	74	36	27
6068050470	4,70	6	74	36	27
6068050480	4,80	6	82	44	33
6068050490	4,90	6	82	44	33
6068050500	5,00	6	82	44	33
6068050510	5,10	6	82	44	33
6068050520	5,20	6	82	44	33
6068050530	5,30	6	82	44	33
6068050540	5,40	6	82	44	33

Cod.	d1	d2	L1	L2	L3
6068050550	5,50	6	82	44	33
6068050555	5,55	6	82	44	33
6068050560	5,60	6	82	44	33
6068050570	5,70	6	82	44	33
6068050580	5,80	6	82	44	33
6068050590	5,90	6	82	44	33
6068050600	6,00	6	82	44	33
6068050610	6,10	8	91	53	40
6068050620	6,20	8	91	53	40
6068050630	6,30	8	91	53	40
6068050640	6,40	8	91	53	40
6068050650	6,50	8	91	53	40
6068050660	6,60	8	91	53	40
6068050670	6,70	8	91	53	40
6068050680	6,80	8	91	53	40
6068050690	6,90	8	91	53	40
6068050700	7,00	8	91	53	40
6068050710	7,10	8	91	53	40
6068050720	7,20	8	91	53	40
6068050730	7,30	8	91	53	40
6068050740	7,40	8	91	53	40
6068050750	7,50	8	91	53	40
6068050760	7,60	8	91	53	40
6068050770	7,70	8	91	53	40
6068050780	7,80	8	91	53	40
6068050790	7,90	8	91	53	40

Cod.	d1	d2	L1	L2	L3
6068050800	8,00	8	91	53	40
6068050810	8,10	10	103	61	47
6068050820	8,20	10	103	61	47
6068050830	8,30	10	103	61	47
6068050840	8,40	10	103	61	47
6068050850	8,50	10	103	61	47
6068050860	8,60	10	103	61	47
6068050870	8,70	10	103	61	47
6068050880	8,80	10	103	61	47
6068050890	8,90	10	103	61	47
6068050900	9,00	10	103	61	47
6068050910	9,10	10	103	61	47
6068050920	9,20	10	103	61	47
6068050930	9,30	10	103	61	47
6068050940	9,40	10	103	61	47
6068050950	9,50	10	103	61	47
6068050960	9,60	10	103	61	47
6068050970	9,70	10	103	61	47
6068050980	9,80	10	103	61	47
6068050990	9,90	10	103	61	47
6068051000	10,00	10	103	61	47
6068051010	10,10	12	118	71	55
6068051020	10,20	12	118	71	55
6068051030	10,30	12	118	71	55
6068051040	10,40	12	118	71	55
6068051050	10,50	12	118	71	55
6068051060	10,60	12	118	71	55
6068051070	10,70	12	118	71	55
6068051080	10,80	12	118	71	55
6068051090	10,90	12	118	71	55
6068051100	11,00	12	118	71	55
6068051110	11,10	12	118	71	55
6068051120	11,20	12	118	71	55
6068051130	11,30	12	118	71	55
6068051140	11,40	12	118	71	55
6068051150	11,50	12	118	71	55
6068051160	11,60	12	118	71	55
6068051170	11,70	12	118	71	55
6068051180	11,80	12	118	71	55
6068051190	11,90	12	118	71	55

Cod.	d1	d2	L1	L2	L3
6068051200	12,00	12	118	71	55
6068051210	12,10	14	124	77	60
6068051220	12,20	14	124	77	60
6068051230	12,30	14	124	77	60
6068051240	12,40	14	124	77	60
6068051250	12,50	14	124	77	60
6068051260	12,60	14	124	77	60
6068051270	12,70	14	124	77	60
6068051280	12,80	14	124	77	60
6068051290	12,90	14	124	77	60
6068051300	13,00	14	124	77	60
6068051310	13,10	14	124	77	60
6068051320	13,20	14	124	77	60
6068051330	13,30	14	124	77	60
6068051340	13,40	14	124	77	60
6068051350	13,50	14	124	77	60
6068051360	13,60	14	124	77	60
6068051370	13,70	14	124	77	60
6068051380	13,80	14	124	77	60
6068051390	13,90	14	124	77	60
6068051400	14,00	14	124	77	60
6068051410	14,10	16	133	83	64
6068051420	14,20	16	133	83	64
6068051430	14,30	16	133	83	64
6068051440	14,40	16	133	83	64
6068051450	14,50	16	133	83	64
6068051460	14,60	16	133	83	64
6068051470	14,70	16	133	83	64
6068051480	14,80	16	133	83	64
6068051490	14,90	16	133	83	64
6068051500	15,00	16	133	83	64
6068051510	15,10	16	133	83	64
6068051520	15,20	16	133	83	64
6068051530	15,30	16	133	83	64
6068051540	15,40	16	133	83	64
6068051550	15,50	16	133	83	64
6068051560	15,60	16	133	83	64
6068051570	15,70	16	133	83	64
6068051580	15,80	16	133	83	64
6068051590	15,90	16	133	83	64

Cod.	d1	d2	L1	L2	L3
6068051600	16,00	16	133	83	64
6068051650	16,50	18	143	93	72
6068051670	16,70	18	143	93	72
6068051690	16,90	18	143	93	72
6068051700	17,00	18	143	93	72
6068051750	17,50	18	143	93	72
6068051770	17,70	18	143	93	72
6068051800	18,00	18	143	93	72
6068051850	18,50	20	153	101	79
6068051870	18,70	20	153	101	79
6068051890	18,90	20	153	101	79
6068051900	19,00	20	153	101	79
6068051930	19,30	20	153	101	79
6068051950	19,50	20	153	101	79
6068051970	19,70	20	153	101	79
6068052000	20,00	20	153	101	79



C. CONDITIONS



APPLICATION



60.6808

SOLID CARBIDE DRILL 8xD INTERNAL COOLANT

Broca metal duro 8xD con refrigeración interior

SC

m7
TOLERANCE

8xD



DRILLANT
600
1200
N/mm²

55
HRC

INOX

GG(G)

**ALU
NE**

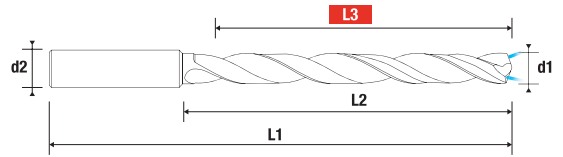
TITAN
INCONELL

UNI

HSC

HPC

HA



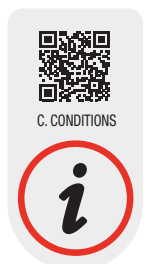
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Cod.	d1	d2	L1	L2	L3
6068080300	3,00	6	70	30	22
6068080310	3,10	6	70	30	22
6068080320	3,20	6	70	30	22
6068080330	3,30	6	70	30	22
6068080340	3,40	6	75	36	26
6068080350	3,50	6	75	36	26
6068080360	3,60	6	75	36	26
6068080370	3,70	6	75	36	26
6068080380	3,80	6	75	38	28
6068080390	3,90	6	75	38	28
6068080400	4,00	6	75	38	28
6068080410	4,10	6	75	38	28
6068080420	4,20	6	75	38	28
6068080430	4,30	6	85	45	34
6068080440	4,40	6	85	45	34
6068080450	4,50	6	85	45	34
6068080460	4,60	6	85	45	34
6068080470	4,70	6	85	45	34
6068080480	4,80	6	90	50	38
6068080490	4,90	6	90	50	38
6068080500	5,00	6	90	50	38
6068080510	5,10	6	90	50	38
6068080520	5,20	6	90	50	38
6068080530	5,30	6	90	50	38

Cod.	d1	d2	L1	L2	L3
6068080540	5,40	6	97	57	44
6068080550	5,50	6	97	57	44
6068080560	5,60	6	97	57	44
6068080570	5,70	6	97	57	44
6068080580	5,80	6	97	57	44
6068080590	5,90	6	97	57	44
6068080600	6,00	6	97	57	44
6068080610	6,10	8	106	66	51
6068080620	6,20	8	106	66	51
6068080630	6,30	8	106	66	51
6068080640	6,40	8	106	66	51
6068080650	6,50	8	106	66	51
6068080660	6,60	8	106	66	51
6068080670	6,70	8	106	66	51
6068080680	6,80	8	106	66	51
6068080690	6,90	8	116	76	59
6068080700	7,00	8	116	76	59
6068080710	7,10	8	116	76	59
6068080720	7,20	8	116	76	59
6068080730	7,30	8	116	76	59
6068080740	7,40	8	116	76	59
6068080750	7,50	8	116	76	59
6068080760	7,60	8	116	76	59
6068080770	7,70	8	116	76	59

Cod.	d1	d2	L1	L2	L3
6068080780	7,80	8	116	76	59
6068080790	7,90	8	116	76	59
6068080800	8,00	8	116	76	59
6068080810	8,10	10	131	87	68
6068080820	8,20	10	131	87	68
6068080830	8,30	10	131	87	68
6068080840	8,40	10	131	87	68
6068080850	8,50	10	131	87	68
6068080860	8,60	10	131	87	68
6068080870	8,70	10	131	87	68
6068080880	8,80	10	131	87	68
6068080890	8,90	10	131	87	68
6068080900	9,00	10	131	87	68
6068080910	9,10	10	139	95	74
6068080920	9,20	10	139	95	74
6068080930	9,30	10	139	95	74
6068080940	9,40	10	139	95	74
6068080950	9,50	10	139	95	74
6068080960	9,60	10	139	95	74
6068080970	9,70	10	139	95	74
6068080980	9,80	10	139	95	74
6068080990	9,90	10	139	95	74
6068081000	10,00	10	139	95	74
6068081010	10,10	12	155	106	83
6068081020	10,20	12	155	106	83
6068081030	10,30	12	155	106	83
6068081040	10,40	12	155	106	83
6068081050	10,50	12	155	106	83
6068081060	10,60	12	155	106	83
6068081070	10,70	12	155	106	83
6068081080	10,80	12	155	106	83
6068081090	10,90	12	155	106	83
6068081100	11,00	12	155	106	83
6068081110	11,10	12	163	114	89
6068081120	11,20	12	163	114	89
6068081130	11,30	12	163	114	89

Cod.	d1	d2	L1	L2	L3
6068081140	11,40	12	163	114	89
6068081150	11,50	12	163	114	89
6068081160	11,60	12	163	114	89
6068081170	11,70	12	163	114	89
6068081180	11,80	12	163	114	89
6068081190	11,90	12	163	114	89
6068081200	12,00	12	163	114	89
6068081250	12,50	14	182	133	104
6068081300	13,00	14	182	133	104
6068081350	13,50	14	182	133	104
6068081400	14,00	14	182	133	104
6068081450	14,50	16	204	152	120
6068081500	15,00	16	204	152	120
6068081550	15,50	16	204	152	120
6068081600	16,00	16	204	152	120
6068081650	16,50	18	223	171	135
6068081700	17,00	18	223	171	135
6068081750	17,50	18	223	171	135
6068081800	18,00	18	223	171	135
6068081850	18,50	20	244	190	150
6068081950	19,50	20	244	190	150
6068082000	20,00	20	244	190	150



60.6812

SOLID CARBIDE DRILL 12xD INTERNAL COOLANT

Broca metal duro 12xD refrigeración interior

SC

h7
TOLERANCE

12XD



DRILLANT
600
1200
N/mm²

55
HRC

INOX

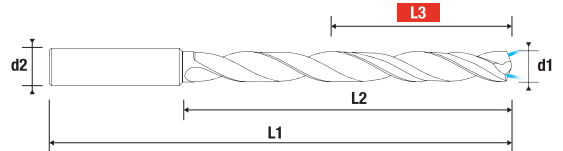
GG(G)
**ALU
NE**

TITAN
INCONELL

UNI

HSC

HPC
HA

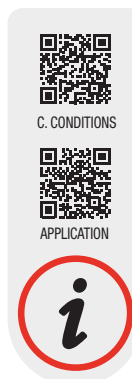


Cod.	d1	d2	L1	L2	L3
6068120300	3,00	6	90	50	38
6068120310	3,10	6	90	50	38
6068120320	3,20	6	90	50	38
6068120330	3,30	6	90	50	38
6068120340	3,40	6	90	50	38
6068120350	3,50	6	90	50	38
6068120360	3,60	6	90	50	38
6068120370	3,70	6	90	50	38
6068120380	3,80	6	102	64	49
6068120390	3,90	6	102	64	49
6068120400	4,00	6	102	64	49
6068120410	4,10	6	102	64	49
6068120420	4,20	6	102	64	49
6068120430	4,30	6	102	64	49
6068120440	4,40	6	102	64	49
6068120450	4,50	6	102	64	49
6068120460	4,60	6	102	64	49
6068120470	4,70	6	102	64	49
6068120480	4,80	6	116	78	60
6068120490	4,90	6	116	78	60
6068120500	5,00	6	116	78	60
6068120510	5,10	6	116	78	60
6068120520	5,20	6	116	78	60
6068120530	5,30	6	116	78	60

Cod.	d1	d2	L1	L2	L3
6068120540	5,40	6	116	78	60
6068120550	5,50	6	116	78	60
6068120560	5,60	6	116	78	60
6068120570	5,70	6	116	78	60
6068120580	5,80	6	116	78	60
6068120590	5,90	6	116	78	60
6068120600	6,00	6	116	78	60
6068120610	6,10	8	146	108	84
6068120620	6,20	8	146	108	84
6068120630	6,30	8	146	108	84
6068120640	6,40	8	146	108	84
6068120650	6,50	8	146	108	84
6068120660	6,60	8	146	108	84
6068120670	6,70	8	146	108	84
6068120680	6,80	8	146	108	84
6068120690	6,90	8	146	108	84
6068120700	7,00	8	146	108	84
6068120710	7,10	8	146	108	84
6068120720	7,20	8	146	108	84
6068120730	7,30	8	146	108	84
6068120740	7,40	8	146	108	84
6068120750	7,50	8	146	108	84
6068120760	7,60	8	146	108	84
6068120770	7,70	8	146	108	84

Cod.	d1	d2	L1	L2	L3
6068120780	7,80	8	146	108	84
6068120790	7,90	8	146	108	84
6068120800	8,00	8	146	108	84
6068120810	8,10	10	162	120	94
6068120820	8,20	10	162	120	94
6068120830	8,30	10	162	120	94
6068120840	8,40	10	162	120	94
6068120850	8,50	10	162	120	94
6068120860	8,60	10	162	120	94
6068120870	8,70	10	162	120	94
6068120880	8,80	10	162	120	94
6068120890	8,90	10	162	120	94
6068120900	9,00	10	162	120	94
6068120910	9,10	10	162	120	94
6068120920	9,20	10	162	120	94
6068120930	9,30	10	162	120	94
6068120940	9,40	10	162	120	94
6068120950	9,50	10	162	120	94
6068120960	9,60	10	162	120	94
6068120970	9,70	10	162	120	94
6068120980	9,80	10	162	120	94
6068120990	9,90	10	162	120	94
6068121000	10,00	10	162	120	94
6068121010	10,10	12	204	156	123
6068121020	10,20	12	204	156	123
6068121030	10,30	12	204	156	123
6068121050	10,50	12	204	156	123
6068121060	10,60	12	204	156	123
6068121070	10,70	12	204	156	123
6068121080	10,80	12	204	156	123
6068121090	10,90	12	204	156	123
6068121100	11,00	12	204	156	123
6068121150	11,50	12	204	156	123
6068121200	12,00	12	204	156	123
6068121230	12,30	14	230	182	144
6068121250	12,50	14	230	182	144
6068121270	12,70	14	230	182	144
6068121300	13,00	14	230	182	144

Cod.	d1	d2	L1	L2	L3
6068121350	13,50	14	230	182	144
6068121400	14,00	14	230	182	144
6068121450	14,50	16	260	208	164
6068121500	15,00	16	260	208	164
6068121550	15,50	16	260	208	164
6068121600	16,00	16	260	208	164
6068121650	16,50	18	285	234	185
6068121700	17,00	18	285	234	185
6068121750	17,50	18	285	234	185
6068121800	18,00	18	285	234	185
6068121850	18,50	20	310	258	204
6068121900	19,00	20	310	258	204
6068121950	19,50	20	310	258	204
6068122000	20,00	20	310	258	204



62.0010

SC

TIN
Up

62
HRC

UNI

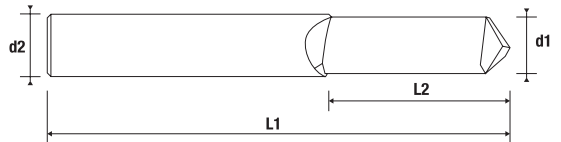


HA



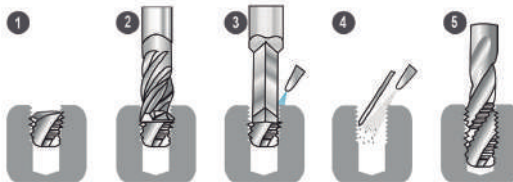
SOLID CARBIDE TAP DESTROYING TOOL

Destruccion de machos rotos en metal duro



Cod.	M	d1	d2	L1	L2
6200100250	M3	2,50	6	50	15
6200100330	M4	3,30	6	50	15
6200100420	M5	4,20	6	50	15
6200100500	M6	5,00	6	50	15
6200100680	M8	6,80	8	60	20
6200100850	M10	8,50	10	70	25
6200101020	M12	10,20	12	75	30
6200101200	M14	12,00	12	75	30
6200101400	M16	14,00	14	100	40
6200101550	M18	15,50	16	100	40
6200101750	M20	17,50	18	100	50

HOW TO REMOVE THE BROKEN TAP FROM THE WORKPIECE



Instruction

Flatten the surface with a solid carbide mill

Apply the drill with pressure lubricant

Clean the tread of the chips with a steel tip and pressurized air

Repair the threaded hole with a new tap

Instrucción

Aplanar la superficie con una fresa de metal duro

Aplicar la broca con lubricante a presión

Limpiar la rosca de los restos de virutas con una punta de acero y aire a presión

Repasar la rosca con un macho nuevo

CUTTING CONDITIONS

Vc (m/min)	12,00
F (mm/r)	
M3	0,0400
M4	0,0400
M5	0,0600
M6	0,0600
M8	0,0800
M10	0,1000
M12	0,1100
M14	0,1200
M16	0,1400
M18	0,1500
M20	0,1700



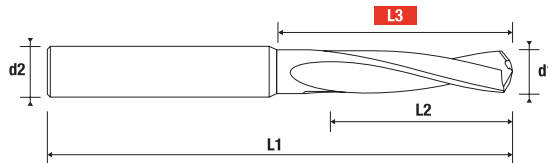
C. CONDITIONS

SOLID CARBIDE SPECIAL DRILL

Broca especial de metal duro

62.6000

DIN
6537K



Cod.	M	d1	d2	L1	L2	L3
6260000260	M3	2,60	6	62	20	14
6260000300	-	3,00	6	62	20	14
6260000340	M4	3,40	6	62	20	14
6260000400	-	4,00	6	66	24	17
6260000430	M5	4,30	6	66	24	17
6260000500	-	5,00	6	66	28	20
6260000510	M6	5,10	6	66	28	20
6260000560	-	5,60	6	66	28	20
6260000600	-	6,00	6	66	28	20
6260000690	M8	6,90	8	79	34	26
6260000710	-	7,10	8	79	41	30
6260000800	-	8,00	8	79	41	30
6260000860	M10	8,60	10	89	47	30
6260000910	-	9,10	10	89	47	36
6260001000	-	10,00	10	89	47	36
6260001040	M12	10,40	12	102	55	42
6260001060	-	10,60	12	102	55	42
6260001110	-	11,10	12	102	55	42
6260001200	-	12,00	12	102	55	42
6260001410	M16	14,10	16	115	65	50

Usar la broca 62.6000 para los taladros previos al roscado, según los diámetros aconsejados para cada rosca
Use drill bit 62.6000 for the holes prior to threading, according to the recommended diameters for each thread

SPECIAL CUTTING CONDITIONS

Hardness (HRC)	Vc	F (mm/rpm)
50-57	15	0,05
58-68	10	0,04



C. CONDITIONS



SC

3XD

RACER

55
HRC

62
HRC

GG(G)



HHC

HPC

HA

Special edge
sharpening



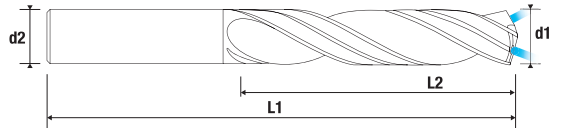
67.6885

DRILL REAMER WITH INTERNAL COOLANT 5XD

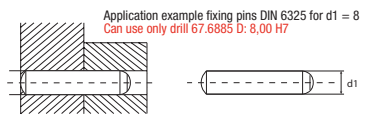
Broca escariadora de metal duro con refrigeración interior 5XD

SC

H7 TOLERANCE	5XD
RACER	600 1200 N/mm ²
55 HRC	INOX
GG(G)	TITAN INCONELL
UNI	
HPC	HA



Cod.	d1	d2	L1	L2
6768850598	5,98	6	81	44
6768850599	5,99	6	81	44
6768850600	6,00	6	81	44
6768850601	6,01	6	81	44
6768850602	6,02	6	91	44
6768850798	7,98	8	91	53
6768850799	7,99	8	91	53
6768850800	8,00	8	91	53
6768850801	8,01	8	91	53
6768850802	8,02	8	91	53
6768850998	9,98	10	103	61
6768850999	9,99	10	103	61
6768851000	10,00	10	103	61
6768851001	10,01	10	103	61
6768851002	10,02	10	103	61
6768851198	11,98	12	118	71
6768851199	11,99	12	118	71
6768851200	12,00	12	118	71
6768851201	12,01	12	118	71
6768851202	12,02	12	118	71
6768851400	14,00	14	124	77
6768851600	16,00	16	133	83
6768851800	18,00	18	143	93
6768852000	20,00	20	153	101



i

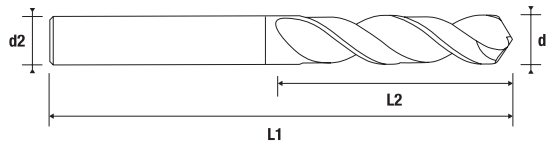
C. CONDITIONS
APPLICATION

Helion

HSSCO DRILL DIN 1897

Broca de acero rápido DIN 1897

11.1360



Cod.	d1	d2	L1	L2	MOQ*
1113600100	1,0	1,0	26	6	5
1113600110	1,1	1,1	28	7	5
1113600120	1,2	1,2	30	8	5
1113600130	1,3	1,3	30	8	5
1113600140	1,4	1,4	32	9	5
1113600150	1,5	1,5	32	9	5
1113600160	1,6	1,6	34	10	5
1113600170	1,7	1,7	34	10	5
1113600180	1,8	1,8	36	11	5
1113600190	1,9	1,9	36	11	5
1113600200	2,0	2,0	38	12	5
1113600210	2,1	2,1	38	12	5
1113600220	2,2	2,2	40	13	5
1113600230	2,3	2,3	40	13	5
1113600240	2,4	2,4	43	14	5
1113600250	2,5	2,5	43	14	5
1113600260	2,6	2,6	43	14	5
1113600270	2,7	2,7	46	16	5
1113600280	2,8	2,8	46	16	5
1113600290	2,9	2,9	46	16	5
1113600300	3,0	3,0	46	16	5
1113600310	3,1	3,1	49	18	5
1113600320	3,2	3,2	49	18	5
1113600330	3,3	3,3	49	18	5
1113600340	3,4	3,4	52	20	5
1113600350	3,5	3,5	52	20	5

Cod.	d1	d2	L1	L2	MOQ*
1113600360	3,6	3,6	52	20	5
1113600370	3,7	3,7	52	20	5
1113600380	3,8	3,8	55	22	5
1113600390	3,9	3,9	55	22	5
1113600400	4,0	4,0	55	22	5
1113600410	4,1	4,1	55	22	5
1113600420	4,2	4,2	55	22	5
1113600430	4,3	4,3	58	24	5
1113600440	4,4	4,4	58	24	5
1113600450	4,5	4,5	58	24	5
1113600460	4,6	4,6	58	24	5
1113600470	4,7	4,7	58	24	5
1113600480	4,8	4,8	62	26	5
1113600490	4,9	4,9	62	26	5
1113600500	5,0	5,0	62	26	5
1113600510	5,1	5,1	62	26	5
1113600520	5,2	5,2	62	26	5
1113600530	5,3	5,3	62	26	5
1113600540	5,4	5,4	66	28	5
1113600550	5,5	5,5	66	28	5
1113600560	5,6	5,6	66	28	5
1113600570	5,7	5,7	66	28	5
1113600580	5,8	5,8	66	28	5
1113600590	5,9	5,9	66	28	5
1113600600	6,0	6,0	66	28	5
1113600610	6,1	6,1	70	31	5



Helion

HSSCO



Cod.	d1	d2	L1	L2	MOQ*
1113600620	6,2	6,2	70	31	5
1113600630	6,3	6,3	70	31	5
1113600640	6,4	6,4	70	31	5
1113600650	6,5	6,5	70	31	5
1113600660	6,6	6,6	70	31	5
1113600670	6,7	6,7	70	31	5
1113600680	6,8	6,8	74	34	5
1113600690	6,9	6,9	74	34	5
1113600700	7,0	7,0	74	34	5
1113600710	7,1	7,1	74	34	5
1113600720	7,2	7,2	74	34	5
1113600730	7,3	7,3	74	34	5
1113600740	7,4	7,4	74	34	5
1113600750	7,5	7,5	74	34	5
1113600760	7,6	7,6	79	37	5
1113600770	7,7	7,7	79	37	5
1113600780	7,8	7,8	79	37	5
1113600790	7,9	7,9	79	37	5
1113600800	8,0	8,0	79	37	2
1113600810	8,1	8,1	79	37	2
1113600820	8,2	8,2	79	37	2
1113600830	8,3	8,3	79	37	2
1113600840	8,4	8,4	79	37	2
1113600850	8,5	8,5	79	37	2
1113600860	8,6	8,6	84	40	2
1113600870	8,7	8,7	84	40	2
1113600880	8,8	8,8	84	40	2
1113600890	8,9	8,9	84	40	2
1113600900	9,0	9,0	84	40	2
1113600910	9,1	9,1	84	40	2
1113600920	9,2	9,2	84	40	2
1113600930	9,3	9,3	84	40	2
1113600940	9,4	9,4	84	40	2
1113600950	9,5	9,5	84	40	2
1113600960	9,6	9,6	89	43	2
1113600970	9,7	9,7	89	43	2
1113600980	9,8	9,8	89	43	2
1113600990	9,9	9,9	89	43	2
1113601000	10,0	10,0	89	43	2
1113601010	10,1	10,1	89	43	2

Cod.	d1	d2	L1	L2	MOQ*
1113601020	10,2	10,2	89	43	2
1113601030	10,3	10,3	89	43	2
1113601040	10,4	10,4	89	43	2
1113601050	10,5	10,5	89	43	2
1113601100	11,0	11,0	95	47	1
1113601150	11,5	11,5	95	47	1
1113601200	12,0	12,0	102	51	1
1113601230	12,3	12,3	102	51	1
1113601250	12,5	12,5	102	51	1
1113601270	12,7	12,7	102	51	1
1113601300	13,0	13,0	102	51	1
1113601310	13,1	13,1	102	51	1
1113601350	13,5	13,5	107	54	1
1113601400	14,0	14,0	107	54	1

* Minimum order quantity due to package size / Cantidad de pedido mínimo.



C. CONDITIONS



APPLICATION



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11.2360

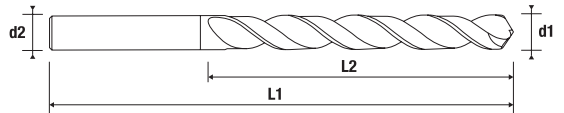
HSSCO DRILL DIN 338

Broca de acero rápido DIN 338

HSSCO



DIN 338



Cod.	d1	d2	L1	L2	MOQ*
1123600100	1,00	1,00	34	12	5
1123600110	1,10	1,10	36	14	5
1123600120	1,20	1,20	38	16	5
1123600130	1,30	1,30	38	16	5
1123600140	1,40	1,40	40	18	5
1123600150	1,50	1,50	40	18	5
1123600160	1,60	1,60	43	20	5
1123600170	1,70	1,70	43	20	5
1123600180	1,80	1,80	46	22	5
1123600190	1,90	1,90	46	22	5
1123600200	2,00	2,00	49	24	5
1123600210	2,10	2,10	49	24	5
1123600220	2,20	2,20	53	27	5
1123600230	2,30	2,30	53	27	5
1123600240	2,40	2,40	57	30	5
1123600250	2,50	2,50	57	30	5
1123600260	2,60	2,60	57	30	5
1123600270	2,70	2,70	61	33	5
1123600280	2,80	2,80	61	33	5
1123600290	2,90	2,90	61	33	5
1123600300	3,00	3,00	61	33	5
1123600310	3,10	3,10	65	36	5
1123600320	3,20	3,20	65	36	5
1123600330	3,30	3,30	65	36	5

Cod.	d1	d2	L1	L2	MOQ*
1123600340	3,40	3,40	70	39	5
1123600350	3,50	3,50	70	39	5
1123600360	3,60	3,60	70	39	5
1123600370	3,70	3,70	70	39	5
1123600380	3,80	3,80	75	43	5
1123600390	3,90	3,90	75	43	5
1123600400	4,00	4,00	75	43	5
1123600410	4,10	4,10	75	43	5
1123600420	4,20	4,20	75	43	5
1123600430	4,30	4,30	80	47	5
1123600440	4,40	4,40	80	47	5
1123600450	4,50	4,50	80	47	5
1123600460	4,60	4,60	80	47	5
1123600470	4,70	4,70	80	47	5
1123600480	4,80	4,80	86	52	5
1123600490	4,90	4,90	86	52	5
1123600500	5,00	5,00	86	52	5
1123600510	5,10	5,10	86	52	2
1123600520	5,20	5,20	86	52	2
1123600530	5,30	5,30	86	52	2
1123600540	5,40	5,40	93	57	2
1123600550	5,50	5,50	93	57	2
1123600560	5,60	5,60	93	57	2
1123600570	5,70	5,70	93	57	2

Cod.	d1	d2	L1	L2	MOQ*	Cod.	d1	d2	L1	L2	MOQ*
1123600580	5,80	5,80	93	57	2	1123600970	9,70	9,70	133	87	2
1123600590	5,90	5,90	93	57	2	1123600980	9,80	9,80	133	87	2
1123600600	6,00	6,00	93	57	2	1123600990	9,90	9,90	133	87	2
1123600610	6,10	6,10	101	63	2	1123601000	10,00	10,00	133	87	2
1123600620	6,20	6,20	101	63	2	1123601010	10,10	10,10	133	87	2
1123600630	6,30	6,30	101	63	2	1123601020	10,20	10,20	133	87	2
1123600640	6,40	6,40	101	63	2	1123601030	10,30	10,30	133	87	2
1123600650	6,50	6,50	101	63	2	1123601040	10,40	10,40	133	87	2
1123600660	6,60	6,60	101	63	2	1123601050	10,50	10,50	133	87	2
1123600670	6,70	6,70	101	63	2	1123601100	11,00	11,00	142	94	1
1123600680	6,80	6,80	109	69	2	1123601150	11,50	11,50	142	94	1
1123600690	6,90	6,90	109	69	2	1123601200	12,00	12,00	151	101	1
1123600700	7,00	7,00	109	69	2	1123601230	12,30	12,30	151	101	1
1123600710	7,10	7,10	109	69	2	1123601250	12,50	12,50	151	101	1
1123600720	7,20	7,20	109	69	2	1123601270	12,70	12,70	151	101	1
1123600730	7,30	7,30	109	69	2	1123601300	13,00	13,00	151	101	1
1123600740	7,40	7,40	109	69	2	1123601310	13,10	13,10	151	101	1
1123600750	7,50	7,50	109	69	2	1123601350	13,50	13,50	160	108	1
1123600760	7,60	7,60	117	75	2	1123601400	14,00	14,00	160	108	1
1123600770	7,70	7,70	117	75	2						
1123600780	7,80	7,80	117	75	2						
1123600790	7,90	7,90	117	75	2						
1123600800	8,00	8,00	117	75	2						
1123600810	8,10	8,10	117	75	2						
1123600820	8,20	8,20	117	75	2						
1123600830	8,30	8,30	117	75	2						
1123600840	8,40	8,40	117	75	2						
1123600850	8,50	8,50	117	75	2						
1123600860	8,60	8,60	125	81	2						
1123600870	8,70	8,70	125	81	2						
1123600880	8,80	8,80	125	81	2						
1123600900	9,00	9,00	125	81	2						
1123600910	9,10	9,10	125	81	2						
1123600920	9,20	9,20	125	81	2						
1123600930	9,30	9,30	125	81	2						
1123600940	9,40	9,40	125	81	2						
1123600950	9,50	9,50	125	81	2						
1123600960	9,60	9,60	133	87	2						

* Minimum order quantity due to package size / Cantidad de pedido mínimo.



C. CONDITIONS



10.2000

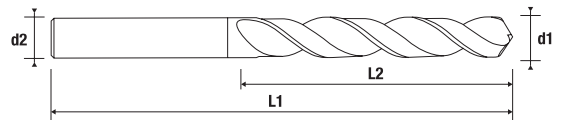
HSS DRILL DIN 338

Broca de acero rápido DIN 338

HSS



DIN 338



Cod.	d1	d2	L1	L2	MOQ*
1020000100	1,00	1,00	34	12	10
1020000110	1,10	1,10	36	14	10
1020000120	1,20	1,20	38	16	10
1020000130	1,30	1,30	38	16	10
1020000140	1,40	1,40	40	18	10
1020000150	1,50	1,50	40	18	10
1020000160	1,60	1,60	43	20	10
1020000170	1,70	1,70	43	20	10
1020000180	1,80	1,80	46	22	10
1020000190	1,90	1,90	46	22	10
1020000200	2,00	2,00	49	24	10
1020000210	2,10	2,10	49	24	10
1020000220	2,20	2,20	53	27	10
1020000230	2,30	2,30	53	27	10
1020000240	2,40	2,40	57	30	10
1020000250	2,50	2,50	57	30	10
1020000260	2,60	2,60	57	30	10
1020000270	2,70	2,70	61	33	10
1020000280	2,80	2,80	61	33	10
1020000290	2,90	2,90	61	33	10
1020000300	3,00	3,00	61	33	10
1020000310	3,10	3,10	65	36	10
1020000320	3,20	3,20	65	36	10
1020000325	3,25	3,25	65	36	10

Cod.	d1	d2	L1	L2	MOQ*
1020000330	3,30	3,30	65	36	10
1020000340	3,40	3,40	70	39	10
1020000350	3,50	3,50	70	39	10
1020000360	3,60	3,60	70	39	10
1020000370	3,70	3,70	70	39	10
1020000380	3,80	3,80	75	43	10
1020000390	3,90	3,90	75	43	10
1020000400	4,00	4,00	75	43	10
1020000410	4,10	4,10	75	43	10
1020000420	4,20	4,20	75	43	10
1020000430	4,30	4,30	80	47	10
1020000440	4,40	4,40	80	47	10
1020000450	4,50	4,50	80	47	10
1020000460	4,60	4,60	80	47	10
1020000470	4,70	4,70	80	47	10
1020000480	4,80	4,80	86	52	10
1020000490	4,90	4,90	86	52	10
1020000500	5,00	5,00	86	52	10
1020000510	5,10	5,10	86	52	10
1020000520	5,20	5,20	86	52	10
1020000530	5,30	5,30	86	52	10
1020000540	5,40	5,40	93	57	10
1020000550	5,50	5,50	93	57	10
1020000560	5,60	5,60	93	57	10

Cod.	d1	d2	L1	L2	MOQ*
1020000570	5,70	5,70	93	57	10
1020000580	5,80	5,80	93	57	10
1020000590	5,90	5,90	93	57	10
1020000600	6,00	6,00	93	57	10
1020000610	6,10	6,10	101	63	10
1020000620	6,20	6,20	101	63	10
1020000630	6,30	6,30	101	63	10
1020000640	6,40	6,40	101	63	10
1020000650	6,50	6,50	101	63	10
1020000660	6,60	6,60	101	63	10
1020000670	6,70	6,70	101	63	10
1020000680	6,80	6,80	109	69	10
1020000690	6,90	6,90	109	69	10
1020000700	7,00	7,00	109	69	10
1020000710	7,10	7,10	109	69	10
1020000720	7,20	7,20	109	69	10
1020000730	7,30	7,30	109	69	10
1020000740	7,40	7,40	109	69	10
1020000750	7,50	7,50	109	69	10
1020000760	7,60	7,60	117	75	5
1020000770	7,70	7,70	117	75	5
1020000780	7,80	7,80	117	75	5
1020000790	7,90	7,90	117	75	5
1020000800	8,00	8,00	117	75	5
1020000810	8,10	8,10	117	75	5
1020000820	8,20	8,20	117	75	5
1020000830	8,30	8,30	117	75	5
1020000840	8,40	8,40	117	75	5
1020000850	8,50	8,50	117	75	5
1020000860	8,60	8,60	125	81	5
1020000870	8,70	8,70	125	81	5
1020000880	8,80	8,80	125	81	5
1020000890	8,90	8,90	125	81	5
1020000900	9,00	9,00	125	81	5
1020000910	9,10	9,10	125	81	5
1020000920	9,20	9,20	125	81	5

Cod.	d1	d2	L1	L2	MOQ*
1020000930	9,30	9,30	125	81	5
1020000940	9,40	9,40	125	81	5
1020000950	9,50	9,50	125	81	5
1020000960	9,60	9,60	133	87	5
1020000970	9,70	9,70	133	87	5
1020000980	9,80	9,80	133	87	5
1020000990	9,90	9,90	133	87	5
1020001000	10,00	10,00	133	87	5
1020001010	10,10	10,10	133	87	5
1020001050	10,50	10,50	133	87	5
1020001100	11,00	11,00	142	94	1
1020001150	11,50	11,50	142	94	1
1020001200	12,00	12,00	151	101	1
1020001250	12,50	12,50	151	101	1
1020001300	13,00	13,00	151	101	1
1020001350	13,50	13,50	160	108	1
1020001400	14,00	14,00	160	108	1
1020001450	14,50	14,50	169	114	1
1020001500	15,00	15,00	169	114	1
1020001550	15,50	15,50	178	120	1
1020001600	16,00	16,00	178	120	1

* Minimum order quantity due to package size / Cantidad de pedido mínimo.



C. CONDITIONS



12.2105

HSS DRILL DIN 338

Broca de acero rápido DIN 338

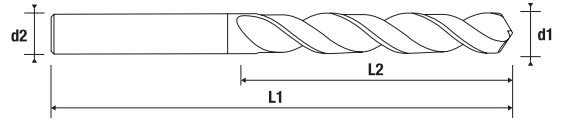
HSS



Special Geometry
HSS edge



DIN 338



Cod.	d1	d2	L1	L2	MOQ*
1221050100	1,00	1,00	34	12	10
1221050110	1,10	1,10	36	14	10
1221050120	1,20	1,20	38	16	10
1221050130	1,30	1,30	38	16	10
1221050140	1,40	1,40	40	18	10
1221050150	1,50	1,50	40	18	10
1221050160	1,60	1,60	43	20	10
1221050170	1,70	1,70	43	20	10
1221050180	1,80	1,80	46	22	10
1221050190	1,90	1,90	46	22	10
1221050200	2,00	2,00	49	24	10
1221050210	2,10	2,10	49	24	10
1221050220	2,20	2,20	53	27	10
1221050230	2,30	2,30	53	27	10
1221050240	2,40	2,40	57	30	10
1221050250	2,50	2,50	57	30	10
1221050260	2,60	2,60	57	30	10
1221050270	2,70	2,70	61	33	10
1221050280	2,80	2,80	61	33	10
1221050290	2,90	2,90	61	33	10
1221050300	3,00	3,00	61	33	10
1221050310	3,10	3,10	65	36	10
1221050330	3,30	3,30	65	36	10
1221050340	3,40	3,40	70	39	10

Cod.	d1	d2	L1	L2	MOQ*
1221050350	3,50	3,50	70	39	10
1221050360	3,60	3,60	70	39	10
1221050370	3,70	3,70	70	39	10
1221050380	3,80	3,80	75	43	10
1221050390	3,90	3,90	75	43	10
1221050400	4,00	4,00	75	43	10
1221050410	4,10	4,10	75	43	10
1221050420	4,20	4,20	75	43	10
1221050430	4,30	4,30	80	47	10
1221050440	4,40	4,40	80	47	10
1221050450	4,50	4,50	80	47	10
1221050460	4,60	4,60	80	47	10
1221050470	4,70	4,70	80	47	10
1221050480	4,80	4,80	86	52	10
1221050490	4,90	4,90	86	52	10
1221050500	5,00	5,00	86	52	10
1221050510	5,10	5,10	86	52	10
1221050520	5,20	5,20	86	52	10
1221050530	5,30	5,30	86	52	10
1221050540	5,40	5,40	93	57	10
1221050550	5,50	5,50	93	57	10
1221050560	5,60	5,60	93	57	10
1221050570	5,70	5,70	93	57	10
1221050580	5,80	5,80	93	57	10

Cod.	d1	d2	L1	L2	MOQ*
1221050590	5,90	5,90	93	57	10
1221050600	6,00	6,00	93	57	10
1221050610	6,10	6,10	101	63	10
1221050620	6,20	6,20	101	63	10
1221050630	6,30	6,30	101	63	10
1221050640	6,40	6,40	101	63	10
1221050650	6,50	6,50	101	63	10
1221050660	6,60	6,60	101	63	10
1221050670	6,70	6,70	101	63	10
1221050680	6,80	6,80	109	69	10
1221050690	6,90	6,90	109	69	10
1221050700	7,00	7,00	109	69	10
1221050710	7,10	7,10	109	69	10
1221050720	7,20	7,20	109	69	10
1221050730	7,30	7,30	109	69	10
1221050740	7,40	7,40	109	69	10
1221050750	7,50	7,50	109	69	10
1221050760	7,60	7,60	117	75	10
1221050770	7,70	7,70	117	75	10
1221050780	7,80	7,80	117	75	10
1221050790	7,90	7,90	117	75	10
1221050800	8,00	8,00	117	75	5
1221050810	8,10	8,10	117	75	5
1221050820	8,20	8,20	117	75	5
1221050830	8,30	8,30	117	75	5
1221050840	8,40	8,40	117	75	5
1221050850	8,50	8,50	117	75	5
1221050860	8,60	8,60	125	81	5
1221050870	8,70	8,70	125	81	5
1221050880	8,80	8,80	125	81	5
1221050890	8,90	8,90	125	81	5
1221050900	9,00	9,00	125	81	5
1221050910	9,10	9,10	125	81	5
1221050920	9,20	9,20	125	81	5
1221050930	9,30	9,30	125	81	5
1221050940	9,40	9,40	125	81	5
1221050950	9,50	9,50	125	81	5
1221050960	9,60	9,60	133	87	5

Cod.	d1	d2	L1	L2	MOQ*
1221050970	9,70	9,70	133	87	5
1221050980	9,80	9,80	133	87	5
1221050990	9,90	9,90	133	87	5
1221051000	10,00	10,00	133	87	5
1221051010	10,10	10,10	133	87	5
1221051020	10,20	10,20	133	87	5
1221051050	10,50	10,50	133	87	5
1221051080	10,80	10,80	142	94	1
1221051100	11,00	11,00	142	94	1
1221051120	11,20	11,20	142	94	1
1221051150	11,50	11,50	142	94	1
1221051180	11,80	11,80	142	94	1
1221051200	12,00	12,00	151	101	1
1221051220	12,20	12,20	151	101	1
1221051250	12,50	12,50	151	101	1
1221051280	12,80	12,80	151	101	1
1221051300	13,00	13,00	151	101	1

* Minimum order quantity due to package size / Cantidad de pedido mínimo.



C. CONDITIONS



BOX HS4100

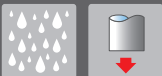
HSS



HSS-E



HSS



BOX HSS TDS UNISSET

Juego machos, brocas de acero rápido y avellanadores HSS

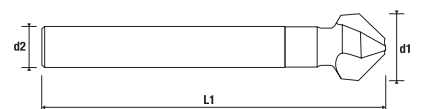
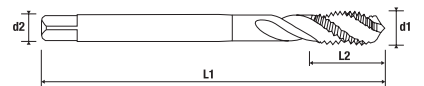
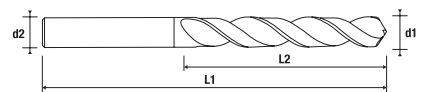


Cod.	d1	d2	L1	L2
1221050250	2,50	2,50	57	30
1221050330	3,30	3,30	65	36
1221050420	4,20	4,20	75	43
1221050500	5,00	5,00	86	52
1221050680	6,80	6,80	109	69
1221050850	8,50	8,50	117	75

Cod.	M	d1	P	d2	L1	L2
401060M03	M3	3	0,50	3,50	56	6
401060M04	M4	4	0,70	4,50	63	8
401060M05	M5	5	0,80	6,00	70	9
401060M06	M6	6	1,00	6,00	80	11
401060M08	M8	8	1,25	8,00	90	14
401060M10	M10	10	1,50	10,00	100	16

Cod.	d1	d2	L1
2103000630	6,30	5	45
2103001240	12,40	8	56

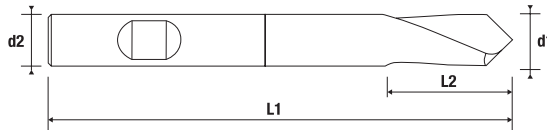
NEW PRODUCT



HSSCO SPOTTING DRILL · NC 90°

Broca de puntear de acero rápido · NC 90°

10.5690



Cod.	d1	d2	L1	L2	MOQ*
1056900300	3	3	46	12	2
1056900400	4	4	55	12	2
1056900500	5	5	62	14	2
1056900600	6	6	66	16	2
1056900800	8	8	79	21	2
1056901000	10	10	89	25	2
1056901200	12	12	102	30	1
1056901600	16	16	115	37,5	1
1056902000	20	20	131	45	1

* Minimum order quantity due to package size / Cantidad de pedido mínimo.

HSSCO



C. CONDITIONS



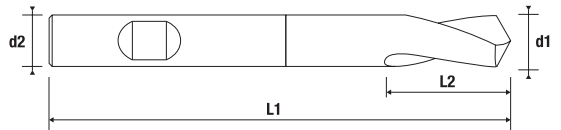
2023
2024
The BIG JUMP
Helion 165

10.5612

HSSCO SPOTTING DRILL • NC 120°

Broca de puntear de acero rápido • NC 120°

HSSCO



Cod.	d1	d2	L1	L2	MOQ*
1056120300	3	3	46	12	2
1056120400	4	4	55	12	2
1056120500	5	5	62	14	2
1056120600	6	6	66	16	2
1056120800	8	8	79	21	2
1056121000	10	10	89	25	2
1056121200	12	12	102	30	1
1056121600	16	16	115	37,5	1
1056122000	20	20	131	45	1

* Minimum order quantity due to package size / Cantidad de pedido mínimo.

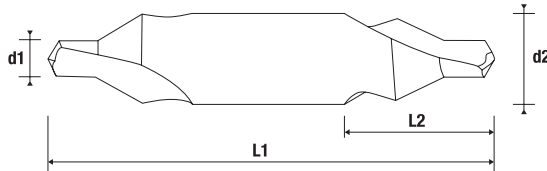


C. CONDITIONS

HSS CENTER DRILL

Broca para centar de acero rápido

10.5510



Cod.	d1	d2	L1	L2	MOQ*
1055100050**	0,50	3,15	25,0	7,0	5
1055100080**	0,80	3,15	25,0	7,0	5
1055100100	1,00	3,15	31,5	7,0	5
1055100125	1,25	3,15	31,5	7,0	5
1055100160	1,60	4,00	35,5	8,5	5
1055100200	2,00	5,00	40,0	10,5	5
1055100250	2,50	6,30	45,0	14,0	5
1055100315	3,15	8,00	50,0	16,0	5
1055100400	4,00	10,00	56,0	19,0	5
1055100500	5,00	12,50	63,0	23,0	1
1055100630	6,30	16,00	71,0	26,0	1
1055100800	8,00	20,00	80,0	32,0	1
1055101000	10,00	25,00	100,0	40,0	1
1055101250	12,50	31,50	125,0	50,0	1

* Minimum order quantity due to package size / Cantidad de pedido mínimo.

** One tip up to Ø 0,80mm / una punta hasta Ø 0,80 mm

HSS



BRIGHT

600
1200
N/mm²

INOX

GG(G)

ALU
NE

TITAN
INCONEL

UNI



HA



C. CONDITIONS

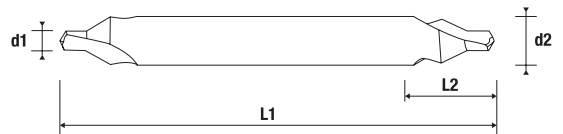


10.5514

HSS CENTER DRILL EXTRA LONG

Broca para centar de acero rápido extra larga

HSS



Cod.	d1	d2	L1	L2
1055140200	2,00	6	120	10,50
1055142500	2,50	8	120	14,00
1055143150	3,15	10	120	16,00



C. CONDITIONS