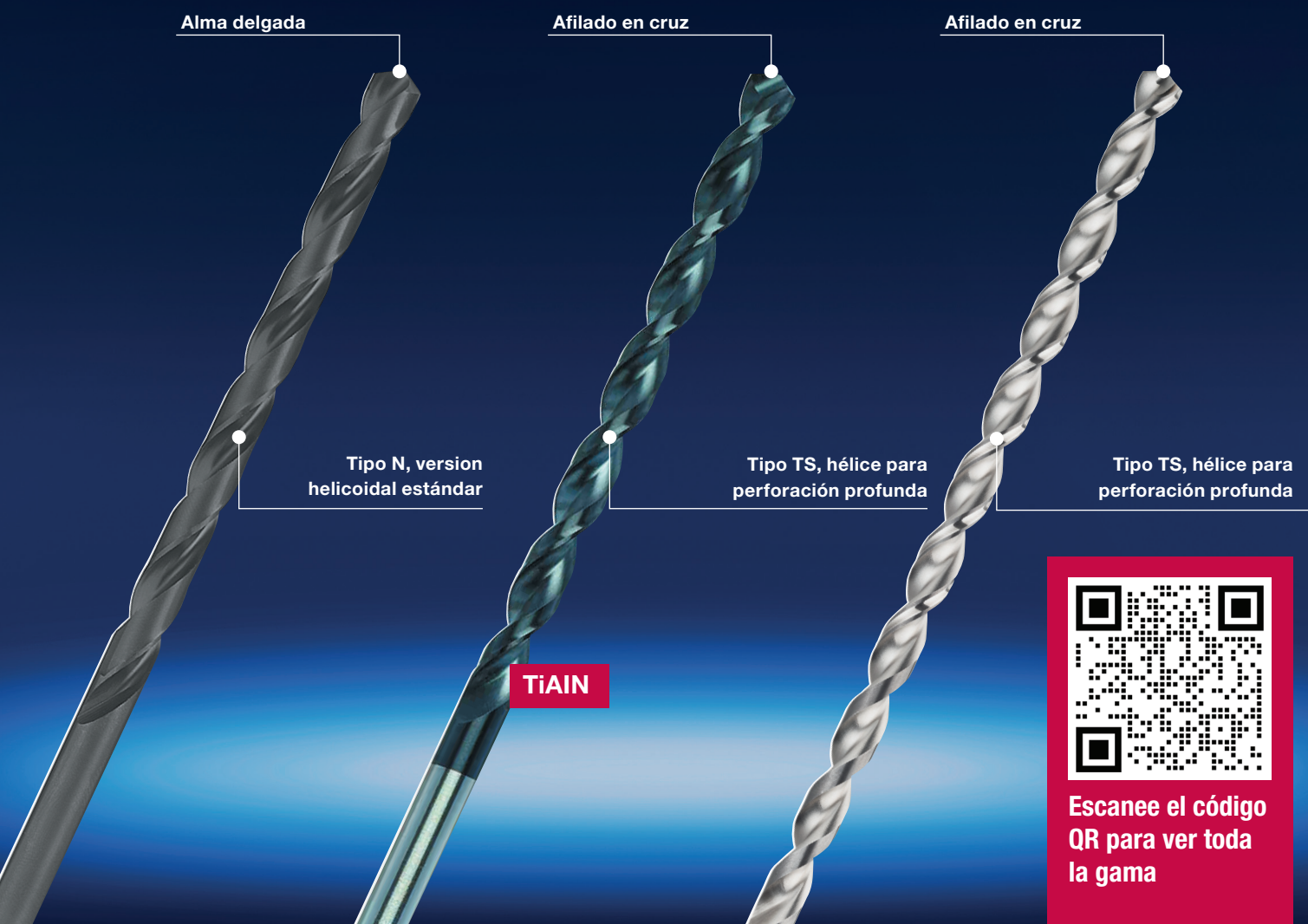


BROCAS LARGAS Y EXTRALARGAS PARA PERFORACIONES PROFUNDAS



¿POR QUÉ LAS LAS BROCAS PHANTOM LARGAS Y EXTRALARGAS HSS/HSS-E

- › Disponible en muchas versiones y longitudes
- › Excelente centrado y particularmente estable, incluso en grandes dimensiones
- › Disponible en mango cilíndrico y mango cónico

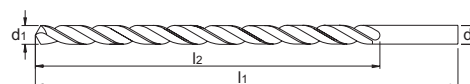
¡NO HAY FIN A LO QUE SE PUEDA HACER!

> 11.850

Phantom



Broca HSS tipo TS



P 11 ≤600 N/mm ²	N 41 Alu	N 43 Mg	N 61 PVC
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18-25 E	60-65 F	55-60 E	18-21 E
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Ref.	d1	d2	l1	l2
11.850.0300	3	3	100	66
11.850.0350	3.5	3.5	112	73
11.850.0400	4	4	119	78
11.850.0450	4.5	4.5	126	82
11.850.0500	5	5	132	87

Ref.	d1	d2	l1	l2
11.850.0550	5.5	5.5	139	91
11.850.0600	6	6	139	91
11.850.0650	6.5	6.5	148	97
11.850.0700	7	7	156	102
11.850.0800	8	8	165	109

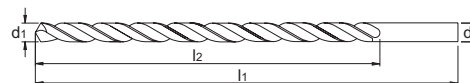
Ref.	d1	d2	l1	l2
11.850.0850	8.5	8.5	165	109
11.850.0900	9	9	175	115
11.850.1000	10	10	184	121
11.850.1050	10.5	10.5	184	121
11.850.1200	12	12	205	134

> 11.860

Phantom



Broca HSS tipo TS



P 11 ≤600 N/mm ²	P 12 ≤850 N/mm ²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%	N 52 CuAlFe	N 61 PVC
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22-24 E	14-22 E	20-25 E	18-22 E	40-45 F	30-36 E	18-21 E
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Ref.	d1	d2	l1	l2
11.860.0100	1	1	56	33
11.860.0150	1.5	1.5	70	45
11.860.0200	2	2	85	56
11.860.0210	2.1	2.1	85	56
11.860.0220	2.2	2.2	90	59
11.860.0230	2.3	2.3	90	59
11.860.0240	2.4	2.4	95	62
11.860.0250	2.5	2.5	95	62
11.860.0260	2.6	2.6	95	62
11.860.0270	2.7	2.7	100	66
11.860.0280	2.8	2.8	100	66
11.860.0290	2.9	2.9	100	66
11.860.0300	3	3	100	66
11.860.0310	3.1	3.1	106	69
11.860.0320	3.2	3.2	106	69
11.860.0330	3.3	3.3	106	69
11.860.0340	3.4	3.4	112	73
11.860.0350	3.5	3.5	112	73
11.860.0360	3.6	3.6	112	73
11.860.0370	3.7	3.7	112	73
11.860.0380	3.8	3.8	119	78
11.860.0390	3.9	3.9	119	78
11.860.0400	4	4	119	78
11.860.0410	4.1	4.1	119	78
11.860.0420	4.2	4.2	119	78
11.860.0430	4.3	4.3	126	82

Ref.	d1	d2	l1	l2
11.860.0440	4.4	4.4	126	82
11.860.0450	4.5	4.5	126	82
11.860.0460	4.6	4.6	126	82
11.860.0470	4.7	4.7	126	82
11.860.0480	4.8	4.8	132	87
11.860.0490	4.9	4.9	132	87
11.860.0500	5	5	132	87
11.860.0510	5.1	5.1	132	87
11.860.0520	5.2	5.2	132	87
11.860.0530	5.3	5.3	132	87
11.860.0540	5.4	5.4	139	91
11.860.0550	5.5	5.5	139	91
11.860.0560	5.6	5.6	139	91
11.860.0570	5.7	5.7	139	91
11.860.0580	5.8	5.8	139	91
11.860.0590	5.9	5.9	139	91
11.860.0600	6	6	139	91
11.860.0610	6.1	6.1	148	97
11.860.0620	6.2	6.2	148	97
11.860.0630	6.3	6.3	148	97
11.860.0640	6.4	6.4	148	97
11.860.0650	6.5	6.5	148	97
11.860.0660	6.6	6.6	148	97
11.860.0670	6.7	6.7	148	97
11.860.0680	6.8	6.8	156	102
11.860.0690	6.9	6.9	156	102

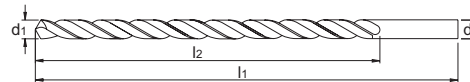
Ref.	d1	d2	l1	l2
11.860.0700	7	7	156	102
11.860.0710	7.1	7.1	156	102
11.860.0720	7.2	7.2	156	102
11.860.0730	7.3	7.3	156	102
11.860.0740	7.4	7.4	156	102
11.860.0750	7.5	7.5	156	102
11.860.0760	7.6	7.6	165	109
11.860.0770	7.7	7.7	165	109
11.860.0780	7.8	7.8	165	109
11.860.0790	7.9	7.9	165	109
11.860.0800	8	8	165	109
11.860.0850	8.5	8.5	165	109
11.860.0870	8.7	8.7	175	115
11.860.0900	9	9	175	115
11.860.0950	9.5	9.5	175	115
11.860.1000	10	10	184	121
11.860.1020	10.2	10.2	184	121
11.860.1050	10.5	10.5	184	121
11.860.1100	11	11	195	128
11.860.1150	11.5	11.5	195	128
11.860.1200	12	12	205	134
11.860.1250	12.5	12.5	205	134
11.860.1300	13	13	205	134
11.860.1400	14	14	214	140
11.860.1500	15	15	220	144
11.860.1600	16	16	227	149

> 11.870

Phantom



Broca HSS-E tipo TS



P 11 ≤600 N/mm ²	P 12 ≤850 N/mm ²	P 13 ≤1000 N/mm ²	P 14 ≤1400 N/mm ²	M 21 INOX ≤850N/mm ²	M 22 INOX >850N/mm ²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%	N 51 Cu	N 52 CuAlFe
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35-40 E	20-40 E	30-40 D	12-16 C	14-18 E	12-16 D	30-35 E	28-30 E	70-80 F	10-15 D	25-30 D
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Ref.	d1	d2	l1	l2
11.870.0200	2	2	85	56
11.870.0250	2.5	2.5	95	62
11.870.0300	3	3	100	66
11.870.0330	3.3	3.3	106	69
11.870.0350	3.5	3.5	112	73
11.870.0400	4	4	119	78
11.870.0420	4.2	4.2	119	78
11.870.0450	4.5	4.5	126	82
11.870.0500	5	5	132	87

Ref.	d1	d2	l1	l2
11.870.0550	5.5	5.5	139	91
11.870.0600	6	6	139	91
11.870.0650	6.5	6.5	148	97
11.870.0680	6.8	6.8	156	102
11.870.0700	7	7	156	102
11.870.0750	7.5	7.5	156	102
11.870.0800	8	8	165	109
11.870.0850	8.5	8.5	165	109
11.870.0900	9	9	175	115

Ref.	d1	d2	l1	l2
11.870.0950	9.5	9.5	175	115
11.870.1000	10	10	184	121
11.870.1020	10.2	10.2	184	121
11.870.1050	10.5	10.5	184	121
11.870.1100	11	11	195	128
11.870.1150	11.5	11.5	195	128
11.870.1200	12	12	205	134
11.870.1250	12.5	12.5	205	134
11.870.1300	13	13	205	134

> 11.874 Phantom



Broca HSS-E tipo TS, TiAlN

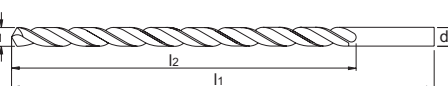


P 11 ≤600 N/mm²	P 12 ≤850 N/mm²	P 13 ≤1000 N/mm²	P 14 ≤1400 N/mm²	M 21 INOX ≤850N/mm²	M 22 INOX >850N/mm²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%	N 52 CuAlFe
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38-42 E	22-48 E	30-40 D	20-34 D	17-22 E	16-20 D	40-45 F	30-36 F	72-85 G	15-20 E
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Ref.	d1	d2	l1	l2
11.874.0200	2	2	85	56
11.874.0250	2.5	2.5	95	62
11.874.0300	3	3	100	66
11.874.0330	3.3	3.3	106	69
11.874.0350	3.5	3.5	112	73
11.874.0400	4	4	119	78
11.874.0420	4.2	4.2	119	78
11.874.0450	4.5	4.5	126	82
11.874.0500	5	5	132	87

Ref.	d1	d2	l1	l2
11.874.0550	5.5	5.5	139	91
11.874.0600	6	6	139	91
11.874.0650	6.5	6.5	148	97
11.874.0680	6.8	6.8	156	102
11.874.0700	7	7	156	102
11.874.0750	7.5	7.5	156	102
11.874.0800	8	8	165	109
11.874.0850	8.5	8.5	165	109
11.874.0900	9	9	175	115



Ref.	d1	d2	l1	l2
11.874.0950	9.5	9.5	175	115
11.874.1000	10	10	184	121
11.874.1020	10.2	10.2	184	121
11.874.1050	10.5	10.5	184	121
11.874.1100	11	11	195	128
11.874.1150	11.5	11.5	195	128
11.874.1200	12	12	205	134

> 11.900 Phantom

Broca HSS

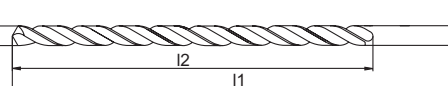


P 11 ≤600 N/mm²	P 12 ≤850 N/mm²	P 13 ≤1000 N/mm²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%	N 43 Mg	N 51 Cu
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20-25 D	15-25 D	8-20 C	18-22 E	14-20 E	35-40 F	50-55 E	20-28 D
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Ref.	d1	d2	l1	l2
11.900.0201	2	2	125	85
11.900.0251	2.5	2.5	140	95
11.900.0301	3	3	150	100
11.900.0303	3	3	190	130
11.900.0351	3.5	3.5	165	115
11.900.0353	3.5	3.5	210	145
11.900.0401	4	4	175	120
11.900.0403	4	4	220	150
11.900.0451	4.5	4.5	185	125
11.900.0453	4.5	4.5	235	160
11.900.0481	4.8	4.8	195	135
11.900.0501	5	5	195	135
11.900.0503	5	5	245	170

Ref.	d1	d2	l1	l2
11.900.0511	5.1	5.1	195	135
11.900.0551	5.5	5.5	205	140
11.900.0553	5.5	5.5	260	180
11.900.0581	5.8	5.8	205	140
11.900.0601	6	6	205	140
11.900.0603	6	6	260	180
11.900.0651	6.5	6.5	215	150
11.900.0653	6.5	6.5	275	190
11.900.0701	7	7	225	155
11.900.0703	7	7	290	200
11.900.0751	7.5	7.5	225	155
11.900.0753	7.5	7.5	290	200
11.900.0801	8	8	240	165



Ref.	d1	d2	l1	l2
11.900.0803	8	8	305	210
11.900.0851	8.5	8.5	240	165
11.900.0853	8.5	8.5	305	210
11.900.0901	9	9	250	175
11.900.0903	9	9	320	220
11.900.0951	9.5	9.5	250	175
11.900.0953	9.5	9.5	320	220
11.900.1001	10	10	265	185
11.900.1003	10	10	340	235
11.900.1101	11	11	280	195
11.900.1103	11	11	365	250
11.900.1201	12	12	295	205
11.900.1203	12	12	375	260

**CONTACTE CON SU DISTRIBUIDOR PARA
OBTENER SUS PRECIOS NETOS**

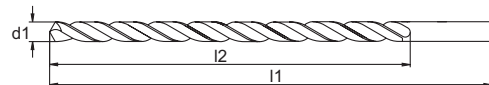
> 11.920

Phantom

Broca HSS tipo TS



HSS	DIN 1869	TS			130°	
P 11 ≤600 N/mm²	P 12 ≤850 N/mm²	P 13 ≤1000 N/mm²	M 21 INOX ≤850N/mm²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%
20-25 D	16-25 D	16-22 C	6-10 C	18-22 E	14-20 E	35-40 F



Ref.	d1	d2	l1	l2
11.920.0201	2	2	125	85
11.920.0251	2.5	2.5	140	95
11.920.0301	3	3	150	100
11.920.0303	3	3	190	130
11.920.0305	3	3	240	160
11.920.0351	3.5	3.5	165	115
11.920.0353	3.5	3.5	210	145
11.920.0355	3.5	3.5	265	180
11.920.0401	4	4	175	120
11.920.0403	4	4	220	150
11.920.0405	4	4	280	190
11.920.0407	4	4	400	300
11.920.0451	4.5	4.5	185	125
11.920.0453	4.5	4.5	235	160
11.920.0455	4.5	4.5	295	200
11.920.0501	5	5	195	135
11.920.0503	5	5	245	170
11.920.0505	5	5	315	210
11.920.0507	5	5	500	350
11.920.0551	5.5	5.5	205	140
11.920.0553	5.5	5.5	260	180
11.920.0557	5.5	5.5	330	225
11.920.0601	6	6	205	140

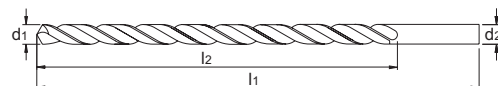
Ref.	d1	d2	l1	l2
11.920.0603	6	6	260	180
11.920.0605	6	6	330	225
11.920.0607	6	6	600	400
11.920.0608	6	6	500	400
11.920.0651	6.5	6.5	215	150
11.920.0653	6.5	6.5	275	190
11.920.0655	6.5	6.5	350	235
11.920.0701	7	7	225	155
11.920.0703	7	7	290	200
11.920.0705	7	7	370	250
11.920.0751	7.5	7.5	225	155
11.920.0753	7.5	7.5	290	200
11.920.0755	7.5	7.5	370	250
11.920.0801	8	8	240	165
11.920.0803	8	8	305	210
11.920.0805	8	8	390	265
11.920.0809	8	8	500	400
11.920.0851	8.5	8.5	240	165
11.920.0853	8.5	8.5	305	210
11.920.0901	9	9	250	175
11.920.0903	9	9	320	220
11.920.0905	9	9	410	280
11.920.0951	9.5	9.5	250	175

Ref.	d1	d2	l1	l2
11.920.0953	9.5	9.5	320	220
11.920.0955	9.5	9.5	410	280
11.920.1001	10	10	265	185
11.920.1003	10	10	340	235
11.920.1005	10	10	430	295
11.920.1008	10	10	600	500
11.920.1051	10.5	10.5	265	185
11.920.1053	10.5	10.5	340	235
11.920.1054	10.5	10.5	430	295
11.920.1101	11	11	280	195
11.920.1103	11	11	365	250
11.920.1104	11	11	455	310
11.920.1151	11.5	11.5	280	195
11.920.1153	11.5	11.5	365	250
11.920.1201	12	12	295	205
11.920.1203	12	12	375	260
11.920.1205	12	12	480	330
11.920.1206	12	12	600	500
11.920.1251	12.5	12.5	295	205
11.920.1253	12.5	12.5	375	260
11.920.1301	13	13	295	205
11.920.1303	13	13	375	260
11.920.1401	14	14	300	200

> 11.940

Phantom

Broca HSS-E tipo TS



HSS-E	DIN 1869	TS			130°	
P 11 ≤600 N/mm²	P 12 ≤850 N/mm²	P 13 ≤1000 N/mm²	P 14 ≤1400 N/mm²	M 21 INOX ≤850N/mm²	M 22 INOX >850N/mm²	K 31 GG
30-35 D	20-30 D	10-20 C	8-10 B	8-10 C	6-10 B	25-30 D

Ref.	d1	d2	l1	l2
11.940.0301	3	3	150	100
11.940.0303	3	3	190	130
11.940.0351	3.5	3.5	165	115
11.940.0353	3.5	3.5	210	145
11.940.0355	3.5	3.5	265	180
11.940.0401	4	4	175	120
11.940.0403	4	4	220	150
11.940.0405	4	4	280	190
11.940.0451	4.5	4.5	185	125
11.940.0453	4.5	4.5	235	160
11.940.0501	5	5	195	135
11.940.0503	5	5	245	170
11.940.0505	5	5	315	210
11.940.0551	5.5	5.5	205	140
11.940.0553	5.5	5.5	260	180
11.940.0601	6	6	205	140

Ref.	d1	d2	l1	l2
11.940.0603	6	6	260	180
11.940.0605	6	6	330	225
11.940.0651	6.5	6.5	215	150
11.940.0653	6.5	6.5	275	190
11.940.0701	7	7	225	155
11.940.0703	7	7	290	200
11.940.0705	7	7	370	250
11.940.0751	7.5	7.5	225	155
11.940.0753	7.5	7.5	290	200
11.940.0801	8	8	240	165
11.940.0803	8	8	305	210
11.940.0805	8	8	390	265
11.940.0851	8.5	8.5	240	165
11.940.0853	8.5	8.5	305	210
11.940.0901	9	9	250	175
11.940.0903	9	9	320	220

Ref.	d1	d2	l1	l2
11.940.0905	9	9	410	280
11.940.0951	9.5	9.5	250	175
11.940.0953	9.5	9.5	320	220
11.940.1001	10	10	265	185
11.940.1003	10	10	340	235
11.940.1005	10	10	430	295
11.940.1101	11	11	280	195
11.940.1103	11	11	365	250
11.940.1104	11	11	455	310
11.940.1201	12	12	295	205
11.940.1203	12	12	375	260
11.940.1205	12	12	480	330
11.940.1301	13	13	295	205
11.940.1303	13	13	375	260

Phantom 

MACHOS MÁQUINA UNI

Primera opción
Garantía de rosca homologada
1 macho para todos los materiales



Eerste keus
Verzekerd van goedgekeurd schroefdraad
1 tap voor alle materialen

Premier choix
Filetage homologué garanti
1 taraud adapté à toutes les matières

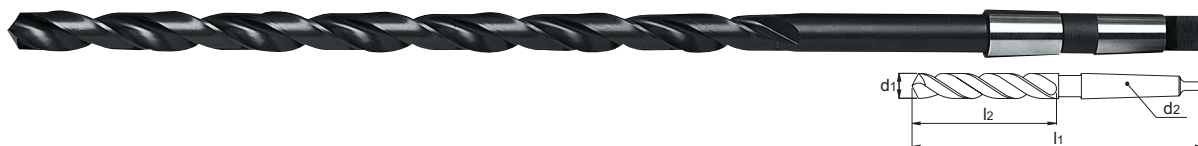
First choice
Assured of approved thread
1 tap for all materials

Erste Wahl
Garantiert bewährte Gewinde
1 Gewindebohrer für alle Materialien

CONSULTE NUESTRA GAMA EN WWW.PHANTOM.EU

> 12.900 Phantom

Broca HSS CM



HSS	OX.	DIN 1870	N	DIN 228-B		118° 		
P 11 ≤600 N/mm²	P 12 ≤850 N/mm²	P 13 ≤1000 N/mm²	M 21 INOX ≤850N/mm²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%	N 51 Cu	N 61 PVC
25-27	22-30	15-20	8-12	15-20	25-30	45-50	25-40	22-28

Ref.	d1	d2	l1	l2
12.900.1001	10	MK 1	285	185
12.900.1003	10	MK 1	360	235
12.900.1051	10.5	MK 1	285	185
12.900.1053	10.5	MK 1	360	235
12.900.1101	11	MK 1	300	195
12.900.1103	11	MK 1	375	250
12.900.1151	11.5	MK 1	300	195
12.900.1201	12	MK 1	310	205
12.900.1203	12	MK 1	395	260
12.900.1251	12.5	MK 1	310	205
12.900.1253	12.5	MK 1	395	260
12.900.1301	13	MK 1	310	205
12.900.1303	13	MK 1	395	260
12.900.1351	13.5	MK 1	325	220
12.900.1353	13.5	MK 1	410	275
12.900.1401	14	MK 1	325	220
12.900.1403	14	MK 1	410	275
12.900.1451	14.5	MK 2	340	220
12.900.1453	14.5	MK 2	425	275
12.900.1501	15	MK 2	340	220
12.900.1503	15	MK 2	425	275
12.900.1551	15.5	MK 2	355	230
12.900.1553	15.5	MK 2	445	295
12.900.1601	16	MK 2	355	230

Ref.	d1	d2	l1	l2
12.900.1603	16	MK 2	445	295
12.900.1651	16.5	MK 2	355	230
12.900.1653	16.5	MK 2	445	295
12.900.1701	17	MK 2	355	230
12.900.1703	17	MK 2	445	295
12.900.1751	17.5	MK 2	370	245
12.900.1753	17.5	MK 2	465	310
12.900.1801	18	MK 2	370	245
12.900.1803	18	MK 2	465	310
12.900.1851	18.5	MK 2	370	245
12.900.1853	18.5	MK 2	465	310
12.900.1901	19	MK 2	370	245
12.900.1903	19	MK 2	465	310
12.900.1951	19.5	MK 2	385	260
12.900.1953	19.5	MK 2	490	325
12.900.2001	20	MK 2	385	260
12.900.2003	20	MK 2	490	325
12.900.2051	20.5	MK 2	385	260
12.900.2053	20.5	MK 2	490	325
12.900.2101	21	MK 2	385	260
12.900.2103	21	MK 2	490	325
12.900.2201	22	MK 2	405	270
12.900.2203	22	MK 2	515	345
12.900.2301	23	MK 2	405	270

Ref.	d1	d2	l1	l2
12.900.2303	23	MK 2	515	345
12.900.2401	24	MK 3	440	290
12.900.2403	24	MK 3	555	365
12.900.2501	25	MK 3	440	290
12.900.2503	25	MK 3	555	365
12.900.2601	26	MK 3	440	290
12.900.2603	26	MK 3	555	365
12.900.2701	27	MK 3	460	305
12.900.2801	28	MK 3	460	305
12.900.2803	28	MK 3	580	385
12.900.2901	29	MK 3	460	305
12.900.3001	30	MK 3	460	305
12.900.3003	30	MK 3	580	385
12.900.3201	32	MK 4	505	320
12.900.3203	32	MK 4	635	410
12.900.3501	35	MK 4	530	340
12.900.3801	38	MK 4	555	360
12.900.4001	40	MK 4	555	360
12.900.4003	40	MK 4	695	460
12.900.4201	42	MK 4	555	360
12.900.4501	45	MK 4	585	385
12.900.4503	45	MK 4	735	490
12.900.5001	50	MK 4	605	405

> 12.910 Phantom

Broca, XXL HSS tipo TS, CM



HSS	OX.	NIT. ≥ Ø 16,0	NORM	TS	DIN 228-B		130° 	
P 11 5600 N/mm²	P 12 5850 N/mm²	P 13 51000 N/mm²	M 21 INOX 58500/mm²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%	N 51 Cu	N 61 PVC
25-27	22-30	15-20	8-12	15-20	25-30	45-50	25-40	22-28

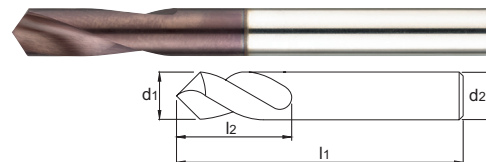
Ref.	d1	d2	l1	l2
12.910.1005	10	MK 1	500	420
12.910.1205	12	MK 1	500	420
12.910.1405	14	MK 1	500	420
12.910.1407	14	MK 1	650	500
12.910.1505	15	MK 2	600	475
12.910.1507	15	MK 2	750	650
12.910.1605	16	MK 2	600	500

Ref.	d1	d2	l1	l2
12.910.1705	17	MK 2	600	500
12.910.1805	18	MK 2	600	500
12.910.1905	19	MK 2	600	500
12.910.2005	20	MK 2	600	500
12.910.2105	21	MK 2	600	500
12.910.2205	22	MK 2	600	500
12.910.2305	23	MK 2	600	500

Ref.	d1	d2	l1	l2
12.910.2405	24	MK 3	600	475
12.910.2505	25	MK 3	600	475
12.910.2605	26	MK 3	600	475
12.910.2805	28	MK 3	600	475
12.910.3005	30	MK 3	600	475
12.910.3503	35	MK 4	600	450
12.910.3803	38	MK 4	600	450

> 15.704 Phantom

Broca de puntear NC HSS-E TiAlN, 120°



HSS-E	120°	TiAlN	h6
P 11 ≤800 N/mm²	P 12 ≤850 N/mm²	P 13 ≤1000 N/mm²	M 21 INOX ≤850 N/mm²
M 22 INOX >850 N/mm²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%
N 43 Mg	N 51 Cu	N 52 CuAlFe	
35-45 E	25-45 E	20-25 F	10-20 D
10-15 C	40-45 E	30-40 D	75-100 E
60-80 E	40-45 D	20-25 D	

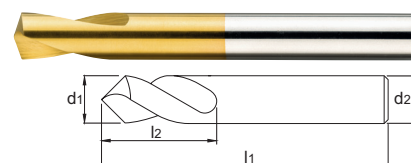
Ref.	d1	d2	l1	l2
15.704.0300	3	3	50	10
15.704.0400	4	4	52	12
15.704.0500	5	5	60	15
15.704.0600	6	6	66	20

Ref.	d1	d2	l1	l2
15.704.0800	8	8	79	25
15.704.1000	10	10	89	25
15.704.1200	12	12	102	30
15.704.1600	16	16	115	35

Ref.	d1	d2	l1	l2
15.704.2000	20	20	131	40
15.704.2500	25	25	138	45

> 15.751 Phantom

Broca de puntear NC HSS-E TiN, 142°



HSS-E	TiN	142°	h7
P 11 ≤800 N/mm²	P 12 ≤850 N/mm²	P 13 ≤1000 N/mm²	M 21 INOX ≤850 N/mm²
M 22 INOX >850 N/mm²	K 31 GG	K 32 GGG GTS-GTW	N 42 Alu Si>10%
N 43 Mg	N 51 Cu	N 52 CuAlFe	
35-45 E	25-45 E	20-25 F	10-20 D
10-15 C	40-45 E	30-40 D	75-100 E
60-80 E	40-45 D	20-25 D	

Ref.	d1	d2	l1	l2
15.751.0300	3	3	50	10
15.751.0400	4	4	52	12
15.751.0500	5	5	60	15

Ref.	d1	d2	l1	l2
15.751.0600	6	6	66	20
15.751.0800	8	8	79	25
15.751.1000	10	10	89	25

Ref.	d1	d2	l1	l2
15.751.1200	12	12	102	30
15.751.1600	16	16	115	35
15.751.2000	20	20	131	40

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