

BLUE-MASTER®
by *celessa*



FERRAMENTAS EM
BLISTER E CAPA



BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA

Expositores

Cinza

Ref. BC2B
Ref. BC2FDIN
338

HSS



OX



BC2B			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	5,19
1,50	40 x 18	2	4,77
2,00	49 x 24	2	4,39
2,50	57 x 30	2	4,30
3,00	61 x 33	2	4,30
3,30	65 x 36	2	4,87
3,50	70 x 39	2	4,25
4,00	75 x 43	2	4,51
4,20	75 x 43	1	3,20
4,50	80 x 47	1	3,27
5,00	86 x 52	1	3,36
5,50	93 x 57	1	4,23
5,75	93 x 57	1	4,97
6,00	93 x 57	1	4,12
6,50	101 x 63	1	4,57
6,75	109 x 69	1	5,88
7,00	109 x 69	1	5,47

Blister: 190x60 mm.

BC2B			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	5,78
8,00	117 x 75	1	6,39
8,50	117 x 75	1	6,66
9,00	125 x 81	1	8,22
9,50	125 x 81	1	8,60
10,00	133 x 87	1	9,71
10,25	133 x 87	1	12,54
10,50	133 x 87	1	11,58
11,00	142 x 94	1	12,89
11,50	142 x 94	1	13,80
12,00	151 x 101	1	15,18
12,50	151 x 101	1	16,46
13,00	151 x 101	1	17,05
13,50	160 x 108	1	24,12
14,00	160 x 108	1	26,71

Blister: 230x60 mm.



BC2F			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	4,34
1,50	40 x 18	2	3,47
2,00	49 x 24	2	3,19
2,50	57 x 30	2	3,43
3,00	61 x 33	2	3,12
3,25	65 x 36	2	3,56
3,50	70 x 39	2	3,44
4,00	75 x 43	2	3,74
4,25	75 x 43	1	2,24
4,50	80 x 47	1	2,37
5,00	86 x 52	1	2,45
5,25	86 x 52	1	3,32
5,50	93 x 57	1	3,18
5,75	93 x 57	1	4,28

BC2F			
Ø mm	L1 x L2 mm		€
6,00	93 x 57	1	3,30
6,50	101 x 63	1	3,66
6,75	109 x 69	1	4,72
7,00	109 x 69	1	4,54
7,50	109 x 69	1	4,70
8,00	117 x 75	1	5,44
8,50	117 x 75	1	5,78
9,00	125 x 81	1	7,47
9,50	125 x 81	1	8,14
10,00	133 x 87	1	8,53
10,50	133 x 87	1	10,60
11,00	142 x 94	1	12,14
12,00	151 x 101	1	14,51
13,00	151 x 101	1	16,72

R.P.M. recomendadas:

METAL	Ø 2	Ø 4	Ø 6	Ø 8	Ø 10	Ø 12
Brando	3000	1600	950	800	630	450
Meio	2200	1200	725	625	490	375
Duro	1400	800	500	450	350	300

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.

BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA



Ref. BC02B
Ref. BC02F

**DIN
338**

**HSS-G
Plus**



**OX
DOURADO**

**70
Kg/mm²**

BC02B			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	5,98
1,50	40 x 18	2	5,69
2,00	49 x 24	2	4,55
2,50	57 x 30	2	4,55
3,00	61 x 33	2	4,61
3,30	65 x 36	2	5,15
3,50	70 x 39	2	4,53
4,00	75 x 43	2	5,17
4,20	75 x 43	1	3,42
4,50	80 x 47	1	3,46
5,00	86 x 52	1	3,61
5,50	93 x 57	1	4,49
5,75	93 x 57	1	5,69
6,00	93 x 57	1	4,49
6,50	101 x 63	1	5,34
6,75	109 x 69	1	6,43
7,00	109 x 69	1	6,43

Blister: 190x60 mm.

BC02B			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	6,39
8,00	117 x 75	1	6,90
8,50	117 x 75	1	8,10
9,00	125 x 81	1	9,03
9,50	125 x 81	1	9,64
10,00	133 x 87	1	10,67
10,25	133 x 87	1	15,31
10,50	133 x 87	1	12,44
11,00	142 x 94	1	14,22
11,50	142 x 94	1	15,10
12,00	151 x 101	1	16,68
12,50	151 x 101	1	17,96
13,00	151 x 101	1	18,88
13,50	160 x 108	1	25,83
14,00	160 x 108	1	28,96

Blister: 230x60 mm.



BC02F			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	4,86
1,50	40 x 18	2	4,50
2,00	49 x 24	2	3,72
2,50	57 x 30	2	4,08
3,00	61 x 33	2	3,53
3,25	65 x 36	2	3,87
3,50	70 x 39	2	3,87
4,00	75 x 43	2	4,34
4,25	75 x 43	1	2,46
4,50	80 x 47	1	2,53
5,00	86 x 52	1	2,72
5,25	86 x 52	1	3,67
5,50	93 x 57	1	3,56
5,75	93 x 57	1	4,76

BC02F			
Ø mm	L1 x L2 mm		€
6,00	93 x 57	1	3,77
6,50	101 x 63	1	4,33
6,75	109 x 69	1	5,35
7,00	109 x 69	1	5,13
7,50	109 x 69	1	5,37
8,00	117 x 75	1	6,20
8,50	117 x 75	1	6,84
9,00	125 x 81	1	8,34
9,50	125 x 81	1	9,04
10,00	133 x 87	1	9,80
10,50	133 x 87	1	11,92
11,00	142 x 94	1	13,74
12,00	151 x 101	1	16,18
13,00	151 x 101	1	18,51

R.P.M. recomendadas:

METAL	Ø 2	Ø 4	Ø 6	Ø 8	Ø 10	Ø 12
Brando	3000	1600	950	800	630	450
Meio	2200	1200	725	625	490	375
Duro	1400	800	500	450	350	300



BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA

Expositores

Cinza

Ref. BC5B
Ref. BC5F**DIN
338****HSSCo
5%****120
Kg/mm²**

BC5B			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	6,90
1,50	40 x 18	2	6,31
2,00	49 x 24	2	6,74
2,50	57 x 30	2	6,58
3,00	61 x 33	2	6,39
3,30	65 x 36	2	7,17
3,50	70 x 39	2	7,33
4,00	75 x 43	2	7,59
4,20	75 x 43	1	4,67
4,50	80 x 47	1	4,96
5,00	86 x 52	1	4,97
5,50	93 x 57	1	6,07
5,75	93 x 57	1	6,70
6,00	93 x 57	1	6,44
6,50	101 x 63	1	7,55
6,75	109 x 69	1	8,66
7,00	109 x 69	1	8,25

Blister: 190x60 mm.

BC5B			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	9,08
8,00	117 x 75	1	10,11
8,50	117 x 75	1	11,01
9,00	125 x 81	1	13,35
9,50	125 x 81	1	13,44
10,00	133 x 87	1	14,98
10,25	133 x 87	1	24,51
10,50	133 x 87	1	21,33
11,00	142 x 94	1	23,59
11,50	142 x 94	1	27,15
12,00	151 x 101	1	28,87
12,50	151 x 101	1	34,95
13,00	151 x 101	1	35,40
13,50	160 x 108	1	38,84
14,00	160 x 108	1	38,84

Blister: 230x60 mm.



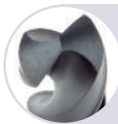
BC5F			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	5,98
1,50	40 x 18	2	5,61
2,00	49 x 24	2	5,98
2,50	57 x 30	2	5,69
3,00	61 x 33	2	5,47
3,25	65 x 36	2	6,45
3,50	70 x 39	2	6,43
4,00	75 x 43	2	6,77
4,25	75 x 43	1	3,87
4,50	80 x 47	1	3,98
5,00	86 x 52	1	4,06
5,25	86 x 52	1	4,97
5,50	93 x 57	1	5,19
5,75	93 x 57	1	5,84

BC5F			
Ø mm	L1 x L2 mm		€
6,00	93 x 57	1	5,55
6,50	101 x 63	1	6,43
6,75	109 x 69	1	7,53
7,00	109 x 69	1	7,07
7,50	109 x 69	1	7,45
8,00	117 x 75	1	8,80
8,50	117 x 75	1	9,09
9,00	125 x 81	1	11,80
9,50	125 x 81	1	12,14
10,00	133 x 87	1	13,25
10,50	133 x 87	1	19,11
11,00	142 x 94	1	20,72
12,00	151 x 101	1	26,13
13,00	151 x 101	1	32,96

R.P.M. recomendadas:

METAL	Ø 2	Ø 4	Ø 6	Ø 8	Ø 10	Ø 12
Brando	4000	2000	1300	1000	800	700
Meio	3200	1600	1000	800	650	550
Duro	2300	1100	1700	600	475	350

BROCAS CABO CILINDRICO REDUZIDO RETIFICADAS EM EMBALAGEM TELESCÓPICA



Ref. BC9P

DIN
338

HSS



70
Kg/mm²

12,70

BC9P				
	Ø mm	L ₁ x L ₂ mm		€
14x169mm	13,50	160 x 108	1	31,92
	14,00	160 x 108	1	33,90
	14,50	169 x 114	1	36,66
	15,00	169 x 114	1	37,01
Quadro pack: 20x205 mm	15,50	178 x 120	1	42,73
	16,00	178 x 120	1	44,29
	16,50	184 x 125	1	49,62
	17,00	184 x 125	1	49,62
	17,50	191 x 130	1	56,45
	18,00	191 x 130	1	59,51
	18,50	198 x 135	1	63,61
	19,00	198 x 135	1	63,61
	19,50	205 x 140	1	69,20
	20,00	205 x 140	1	80,24
	20,50	205 x 140	1	89,60
	21,00	205 x 140	1	83,39

BC9P				
	Ø mm	L ₁ x L ₂ mm		€
Quadro pack: 26x258 mm	21,50	209 x 140	1	96,98
	22,00	209 x 140	1	90,43
	22,50	214 x 140	1	96,73
	23,00	214 x 140	1	99,03
	23,50	220 x 145	1	109,93
	24,00	220 x 145	1	108,71
	24,50	225 x 150	1	117,12
	25,00	225 x 150	1	118,87
32x273 mm	26,00	243 x 157	1	142,59
	27,00	243 x 157	1	153,15
	28,00	253 x 167	1	158,46
	29,00	253 x 167	1	186,01
	30,00	258 x 171	1	195,52

R.P.M. recomendadas:

METAL	Ø 14	Ø 15	Ø 16	Ø 18	Ø 20
Brando	429	400	375	333	300
Meio	314	293	275	244	220
Duro	200	200	175	156	140



Ref. BC99P

DIN
338

HSSCo
5%



120
Kg/mm²

12,70

R.P.M. recomendadas:

METAL	Ø 14	Ø 15	Ø 16	Ø 18	Ø 20
Brando	571	533	500	444	400
Meio	457	427	400	356	320
Duro	329	287	271	256	230

BC99P				
	Ø mm	L ₁ x L ₂ mm		€
14x169mm	13,50	160 x 108	1	51,75
	14,00	160 x 108	1	53,96
	14,50	169 x 114	1	72,31
Quadro pack: 20x205 mm	15,00	169 x 114	1	75,50
	15,50	178 x 120	1	81,92
	16,00	178 x 120	1	84,40
	16,50	184 x 125	1	96,23
	17,00	184 x 125	1	96,86
	17,50	191 x 130	1	105,59
	18,00	191 x 130	1	114,60
	18,50	198 x 135	1	127,86
	19,00	198 x 135	1	126,76
	19,50	205 x 140	1	140,45
	20,00	205 x 140	1	150,47

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.



BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA

Ref. BC18B
Ref. BC18FDIN
338

HSS



TiN

ALTA
PRODUÇÃO

BC18B			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	6,44
1,50	40 x 18	2	5,52
2,00	49 x 24	2	5,55
2,50	57 x 30	2	6,03
3,00	61 x 33	2	5,61
3,30	65 x 36	2	6,82
3,50	70 x 39	2	6,46
4,00	75 x 43	2	6,99
4,20	75 x 43	1	4,12
4,50	80 x 47	1	4,07
5,00	86 x 52	1	4,09
5,50	93 x 57	1	4,74
5,75	93 x 57	1	5,43
6,00	93 x 57	1	4,68
6,50	101 x 63	1	7,97
6,75	109 x 69	1	8,95
7,00	109 x 69	1	8,34

Blister: 190x60 mm.

BC18B			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	9,12
8,00	117 x 75	1	9,41
8,50	117 x 75	1	10,36
9,00	125 x 81	1	11,29
9,50	125 x 81	1	11,89
10,00	133 x 87	1	12,18
10,25	133 x 87	1	21,00
10,50	133 x 87	1	19,55
11,00	142 x 94	1	20,59
11,50	142 x 94	1	21,14
12,00	151 x 101	1	22,03
12,50	151 x 101	1	25,89
13,00	151 x 101	1	27,04
13,50	160 x 108	1	32,24
14,00	160 x 108	1	33,30

Blister: 230x60 mm.



BC18F			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	5,87
1,50	40 x 18	2	4,96
2,00	49 x 24	2	4,87
2,50	57 x 30	2	5,39
3,00	61 x 33	2	4,87
3,25	65 x 36	2	5,84
3,50	70 x 39	2	5,67
4,00	75 x 43	2	6,15
4,25	75 x 43	1	3,24
4,50	80 x 47	1	3,20
5,00	86 x 52	1	3,24
5,25	86 x 52	1	3,93
5,50	93 x 57	1	3,85
5,75	93 x 57	1	4,71

BC18F			
Ø mm	L1 x L2 mm		€
6,00	93 x 57	1	3,88
6,50	101 x 63	1	7,20
6,75	109 x 69	1	7,88
7,00	109 x 69	1	7,70
7,50	109 x 69	1	8,08
8,00	117 x 75	1	8,53
8,50	117 x 75	1	9,50
9,00	125 x 81	1	10,40
9,50	125 x 81	1	11,35
10,00	133 x 87	1	11,66
10,50	133 x 87	1	18,88
11,00	142 x 94	1	19,91
12,00	151 x 101	1	21,33
13,00	151 x 101	1	26,34

R.P.M. recomendadas:

METAL	Ø 2	Ø 4	Ø 6	Ø 8	Ø 10	Ø 12
Brando	4500	2400	1425	1200	950	675
Meio	3300	1800	1100	950	735	560
Duro	2100	1200	750	675	525	450

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.

BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA



Ref. BC95B

DIN
338

HSSCo
5%



BC95B			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	8,40
1,50	40 x 18	2	8,00
2,00	49 x 24	2	8,00
2,50	57 x 30	2	7,26
3,00	61 x 33	2	7,12
3,20	65 x 36	2	8,38
3,30	65 x 36	2	8,39
3,50	70 x 39	2	8,31
4,00	75 x 43	2	8,95
4,20	75 x 43	1	5,01
4,50	80 x 47	1	5,01
5,00	86 x 52	1	5,37
5,50	93 x 57	1	6,78
6,00	93 x 57	1	7,22
6,50	101 x 63	1	8,15
6,80	109 x 69	1	9,33
7,00	109 x 69	1	8,88

Blister: 190x60 mm.

BC95B			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	9,47
8,00	117 x 75	1	11,09
8,50	117 x 75	1	11,57
9,00	125 x 81	1	14,74
9,50	125 x 81	1	16,97
10,00	133 x 87	1	18,31
10,20	133 x 87	1	23,73
10,50	133 x 87	1	23,73
11,00	142 x 94	1	25,78
11,50	142 x 94	1	29,09
12,00	151 x 101	1	30,90
12,50	151 x 101	1	36,85
13,00	151 x 101	1	37,36

Blister: 230x60 mm.



BC95F			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	7,15
1,50	40 x 18	2	6,83
2,00	49 x 24	2	6,83
2,50	57 x 30	2	6,41
3,00	61 x 33	2	6,26
3,20	65 x 36	2	7,46
3,30	65 x 36	2	7,68
3,50	70 x 39	2	7,54
4,00	75 x 43	2	8,23
4,20	75 x 43	1	4,58
4,50	80 x 47	1	4,58
5,00	86 x 52	1	4,89
5,50	93 x 57	1	6,20
6,00	93 x 57	1	6,59
6,50	101 x 63	1	7,69

BC95F			
Ø mm	L1 x L2 mm		€
6,80	109 x 69	1	8,95
7,00	109 x 69	1	8,43
7,50	109 x 69	1	8,93
8,00	117 x 75	1	10,48
8,50	117 x 75	1	10,93
9,00	125 x 81	1	13,93
9,50	125 x 81	1	14,42
10,00	133 x 87	1	15,86
10,20	133 x 87	1	21,40
10,50	133 x 87	1	21,41
11,00	142 x 94	1	23,64
11,50	142 x 94	1	27,21
12,00	151 x 101	1	29,17
12,50	151 x 101	1	35,60
13,00	151 x 101	1	36,12

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.


BROCAS XTURBO COM PONTA GUIA EN BLISTER E CAPA


Ref. BTX

DIN
338
HSSCo
5%
TOL
H8
120
Kg/mm²
 $\varnothing \geq 3$
135°
38°
"S"
INOX
TURBO


BTXB			
Ø mm	L1 x L2 mm		€
3,00	61 x 33	1	2,75
3,20	65 x 36	1	3,38
3,30	65 x 36	1	3,38
3,50	70 x 39	1	3,37
4,00	75 x 43	1	3,40
4,20	75 x 43	1	4,05
4,50	80 x 47	1	4,01
5,00	86 x 52	1	5,18
5,50	93 x 57	1	6,57
6,00	93 x 57	1	6,99
6,50	101 x 63	1	8,17
6,80	109 x 69	1	9,51
7,00	109 x 69	1	8,93

Blister: 190x60 mm.

BTXB			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	9,48
8,00	117 x 75	1	11,11
8,50	117 x 75	1	11,59
9,00	125 x 81	1	14,18
9,50	125 x 81	1	14,92
10,00	133 x 87	1	16,42
10,20	133 x 87	1	21,26
10,50	133 x 87	1	21,27
11,00	142 x 94	1	23,47
11,50	142 x 94	1	26,33
12,00	151 x 101	1	28,22
12,50	151 x 101	1	35,05
13,00	151 x 101	1	35,57

Blister: 230x60 mm.

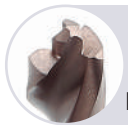


BTXF			
Ø mm	L1 x L2 mm		€
3,00	61 x 33	1	2,26
3,20	65 x 36	1	2,78
3,30	65 x 36	1	2,78
3,50	70 x 39	1	2,77
4,00	75 x 43	1	2,79
4,20	75 x 43	1	3,34
4,50	80 x 47	1	3,43
5,00	86 x 52	1	4,61
5,50	93 x 57	1	5,85
6,00	93 x 57	1	6,22
6,50	101 x 63	1	7,26
6,80	109 x 69	1	8,46
7,00	109 x 69	1	7,94

BTXF			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	8,44
8,00	117 x 75	1	9,88
8,50	117 x 75	1	10,30
9,00	125 x 81	1	13,12
9,50	125 x 81	1	13,60
10,00	133 x 87	1	14,96
10,20	133 x 87	1	20,19
10,50	133 x 87	1	20,20
11,00	142 x 94	1	22,29
11,50	142 x 94	1	25,67
12,00	151 x 101	1	27,51
12,50	151 x 101	1	33,57
13,00	151 x 101	1	34,07



BROCAS TTURBO COM PONTA GUIA EN BLISTER E CAPA



Ref. TTX

DIN
338

HSS

TOL
H8



TTXB			
Ø mm	L1 x L2 mm		€
3,00	61 x 33	1	2,62
3,20	65 x 36	1	3,21
3,30	65 x 36	1	3,21
3,50	70 x 39	1	3,20
4,00	75 x 43	1	3,22
4,20	75 x 43	1	3,85
4,50	80 x 47	1	3,80
5,00	86 x 52	1	4,92
5,50	93 x 57	1	6,25
6,00	93 x 57	1	6,64
6,50	101 x 63	1	7,76
6,80	109 x 69	1	9,03
7,00	109 x 69	1	8,49

Blister: 190x60 mm.

TTXB			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	9,01
8,00	117 x 75	1	10,56
8,50	117 x 75	1	11,01
9,00	125 x 81	1	13,47
9,50	125 x 81	1	14,18
10,00	133 x 87	1	15,59
10,20	133 x 87	1	20,19
10,50	133 x 87	1	20,20
11,00	142 x 94	1	22,30
11,50	142 x 94	1	25,01
12,00	151 x 101	1	26,81
12,50	151 x 101	1	33,31
13,00	151 x 101	1	33,78

Blister: 230x60 mm.



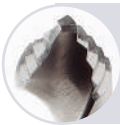
TTXF			
Ø mm	L1 x L2 mm		€
3,00	61 x 33	1	2,06
3,20	65 x 36	1	2,53
3,30	65 x 36	1	2,53
3,50	70 x 39	1	2,52
4,00	75 x 43	1	2,54
4,20	75 x 43	1	3,04
4,50	80 x 47	1	3,11
5,00	86 x 52	1	4,19
5,50	93 x 57	1	5,31
6,00	93 x 57	1	5,65
6,50	101 x 63	1	6,59
6,80	109 x 69	1	7,69
7,00	109 x 69	1	7,21

TTXF			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	7,66
8,00	117 x 75	1	8,98
8,50	117 x 75	1	9,28
9,00	125 x 81	1	11,81
9,50	125 x 81	1	12,24
10,00	133 x 87	1	13,46
10,20	133 x 87	1	18,17
10,50	133 x 87	1	18,18
11,00	142 x 94	1	20,06
11,50	142 x 94	1	23,09
12,00	151 x 101	1	24,76
12,50	151 x 101	1	30,21
13,00	151 x 101	1	30,65

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.



BROCA STEP CUT FÁCIL PERFURAÇÃO EM SUPERFÍCIES CURVADAS E INSTÁVEIS



Ref. TK02B
Ref. TK02F

DIN
338

HSS



STEP CUT

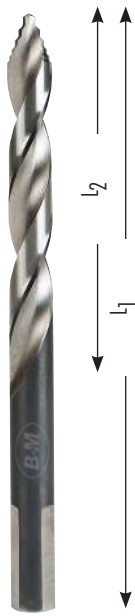


TK02B			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	1	5,13
1,50	40 x 18	1	5,24
2,00	49 x 24	1	5,39
2,50	57 x 30	1	5,99
3,00	61 x 33	1	6,20
3,50	70 x 39	1	7,08
4,00	75 x 43	1	8,06
4,50	80 x 47	1	8,69
5,00	76 x 52	1	9,70
5,50	93 x 57	1	10,17
6,00	93 x 57	1	10,91
6,50	101 x 63	1	12,42
7,00	109 x 69	1	13,95

Blister: 190x60 mm.

TK02B			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	16,00
8,00	117 x 75	1	16,91
8,50	117 x 75	1	19,64
9,00	125 x 81	1	21,45
9,50	125 x 81	1	22,98
10,00	133 x 87	1	24,34
10,50	133 x 87	1	26,87
11,00	142 x 94	1	29,39
11,50	142 x 94	1	32,86
12,00	151 x 101	1	35,48
12,50	151 x 101	1	38,30
13,00	151 x 101	1	40,92

Blister: 230x60 mm.



TK02F			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	1	4,19
1,50	40 x 18	1	4,31
2,00	49 x 24	1	4,45
2,50	57 x 30	1	5,06
3,00	61 x 33	1	5,25
3,50	70 x 39	1	6,14
4,00	75 x 43	1	7,13
4,50	80 x 47	1	7,78
5,00	76 x 52	1	9,01
5,50	93 x 57	1	9,48
6,00	93 x 57	1	10,23
6,50	101 x 63	1	11,73

TK02F			
Ø mm	L1 x L2 mm		€
7,00	109 x 69	1	13,26
7,50	109 x 69	1	15,31
8,00	117 x 75	1	16,00
8,50	117 x 75	1	18,74
9,00	125 x 81	1	20,54
9,50	125 x 81	1	22,06
10,00	133 x 87	1	23,42
10,50	133 x 87	1	25,39
11,00	142 x 94	1	28,24
11,50	133 x 87	1	30,57
12,00	151 x 101	1	33,20
12,50	151 x 101	1	35,78
13,00	151 x 101	1	38,42



BROCA STEP CUT FÁCIL PERFURAÇÃO EM SUPERFÍCIES CURVADAS E INSTÁVEIS



Ref. TK05B
Ref. TK05F

DIN
338

HSSCo
5%

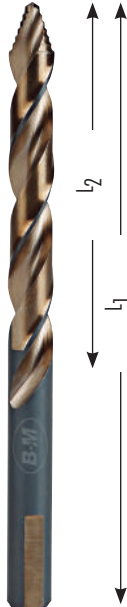


TK05B			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	1	6,32
1,50	40 x 18	1	6,48
2,00	49 x 24	1	6,67
2,50	57 x 30	1	7,49
3,00	61 x 33	1	7,78
3,50	70 x 39	1	8,95
4,00	75 x 43	1	10,29
4,50	80 x 47	1	11,13
5,00	76 x 52	1	12,45
5,50	93 x 57	1	13,08
6,00	93 x 57	1	13,18
6,50	101 x 63	1	15,07
7,00	109 x 69	1	16,97

Blister: 190x60 mm.

TK05B			
Ø mm	L1 x L2 mm		€
7,50	109 x 69	1	19,53
8,00	117 x 75	1	20,57
8,50	117 x 75	1	23,99
9,00	125 x 81	1	26,24
9,50	125 x 81	1	28,15
10,00	133 x 87	1	27,65
10,50	133 x 87	1	30,48
11,00	142 x 94	1	33,37
11,50	142 x 94	1	37,18
12,00	151 x 101	1	40,20
12,50	151 x 101	1	43,32
13,00	151 x 101	1	46,34

Blister: 230x60 mm.



TK05F			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	1	5,39
1,50	40 x 18	1	5,54
2,00	49 x 24	1	5,74
2,50	57 x 30	1	6,55
3,00	61 x 33	1	6,83
3,20	65 x 36	1	7,42
3,50	70 x 39	1	8,01
4,00	75 x 43	1	9,35
4,20	75 x 43	1	9,94
4,50	80 x 47	1	10,22
5,00	76 x 52	1	11,76
5,50	93 x 57	1	12,39
6,00	93 x 57	1	12,49
6,50	101 x 63	1	14,38

TK05F			
Ø mm	L1 x L2 mm		€
6,80	109 x 69	1	15,30
7,00	109 x 69	1	16,28
7,50	109 x 69	1	18,85
8,00	117 x 75	1	19,65
8,50	117 x 75	1	23,07
9,00	125 x 81	1	25,33
9,50	125 x 81	1	27,23
10,00	133 x 87	1	28,18
10,20	133 x 87	1	26,74
10,50	133 x 87	1	28,99
11,00	142 x 94	1	32,22
11,50	142 x 94	1	34,90
12,00	151 x 101	1	37,91
12,50	151 x 101	1	40,81
13,00	151 x 101	1	43,84

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.

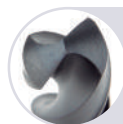


BROCAS CABO CILINDRICO RETIFICADAS EM CAPA



R.P.M. recomendadas:

METAL	Brando	Meio	Duro
Ø 2 mm	3000	2200	1400
Ø 4 mm	1600	1200	800
Ø 6 mm	950	725	500
Ø 8 mm	800	625	450
Ø 10 mm	630	490	350
Ø 12 mm	450	375	300

DIN
340

HSS



OX



BC4F			
Ø mm	L1 x L2 mm		€
1,00	56 x 33	1	6,34
1,50	70 x 45	1	4,53
2,00	85 x 56	1	3,17
2,50	95 x 62	1	3,48
3,00	100 x 66	1	3,19
3,25	106 x 69	1	3,35
3,50	112 x 73	1	3,21
4,00	119 x 78	1	3,48
4,25	119 x 78	1	4,55
4,50	126 x 82	1	4,26
5,00	132 x 87	1	4,51
5,25	132 x 87	1	7,31
5,50	139 x 91	1	5,96
5,75	139 x 91	1	7,80

BC4F			
Ø mm	L1 x L2 mm		€
6,00	139 x 91	1	5,45
6,50	148 x 97	1	7,08
6,75	156 x 102	1	8,66
7,00	156 x 102	1	8,32
7,50	156 x 102	1	8,86
8,00	165 x 109	1	9,60
8,50	165 x 109	1	10,98
9,00	175 x 115	1	11,93
9,50	175 x 115	1	11,98
10,00	184 x 121	1	13,24
10,50	184 x 121	1	17,63
11,00	195 x 128	1	19,57
12,00	205 x 134	1	21,92
13,00	205 x 134	1	26,18

DIN
338HSSCo
8%

DOURADO



R.P.M. recomendadas:

METAL	Brando	Meio	Duro
Ø 2 mm	4000	3200	2300
Ø 4 mm	2000	1600	1100
Ø 6 mm	1300	1000	1700
Ø 8 mm	1000	800	600
Ø 10 mm	800	650	475
Ø 12 mm	700	550	350

BC58F			
Ø mm	L1 x L2 mm		€
1,00	34 x 12	2	8,96
1,50	40 x 18	2	8,52
2,00	49 x 24	2	8,52
2,50	57 x 30	2	8,52
3,00	61 x 33	2	8,25
3,25	65 x 36	2	10,02
3,50	70 x 39	2	9,85
4,00	75 x 43	2	10,64
4,25	75 x 43	1	6,14
4,50	80 x 47	1	6,14
5,00	86 x 52	1	6,65
5,25	86 x 52	1	7,72
5,50	93 x 57	1	8,26
5,75	93 x 57	1	9,14

BC58F			
Ø mm	L1 x L2 mm		€
6,00	93 x 57	1	8,75
6,50	101 x 63	1	10,13
6,75	109 x 69	1	11,82
7,00	109 x 69	1	10,64
7,50	109 x 69	1	11,33
8,00	117 x 75	1	13,17
8,50	117 x 75	1	13,66
9,00	125 x 81	1	17,68
9,50	125 x 81	1	18,24
10,00	133 x 87	1	20,05
10,50	133 x 87	1	29,02
11,00	142 x 94	1	31,90
12,00	151 x 101	1	43,36
13,00	151 x 101	1	54,89



ESTOJOS DE BROCAS PARA METAL COM E SEM BLISTER

HSS



Ref. BC2



Cont.

19 Uds - Ø 1 - 10 x 0,50 mm.

P0010B 73,76 €

19 Uds - Ø 1 - 10 x 0,50 mm.

P0010 64,45 €

25 Uds - Ø 1 - 13 x 0,50 mm.

P0011B 143,36 €

25 Uds - Ø 1 - 13 x 0,50 mm.

P0011 134,09 €

Plus



Ref. BC02



Cont.

19 Uds - Ø 1 - 10 x 0,50 mm.

PP010B 82,62 €

19 Uds - Ø 1 - 10 x 0,50 mm.

PP010 72,86 €

25 Uds - Ø 1 - 13 x 0,50 mm.

PP011B 160,36 €

25 Uds - Ø 1 - 13 x 0,50 mm.

PP011 150,74 €

HSSCo 5%



Ref. BC5



Cont.

19 Uds - Ø 1 - 10 x 0,50 mm.

PC010B 116,94 €

19 Uds - Ø 1 - 10 x 0,50 mm.

PC010 107,70 €

25 Uds - Ø 1 - 13 x 0,50 mm.

PC011B 262,07 €

25 Uds - Ø 1 - 13 x 0,50 mm.

PC011 252,58 €

HSS



Plus



HSSCo 5%



Cont.

15 (Ref. BC2) HSS

Ø 1,5(x2) - 2(x2) - 2,5(x2) - 3 - 3,2 - 3,5 - 4 - 4,5 - 5 - 6 - 8 - 10mm

P0015B 36,55 €

15 (Ref. BC02) Plus

Ø 1,5(x2) - 2(x2) - 2,5(x2) - 3 - 3,2 - 3,5 - 4 - 4,5 - 5 - 6 - 8 - 10mm

PP015B 40,05 €

15 (Ref. BC5) HSSCo 5%

Ø 1,5(x2) - 2(x2) - 2,5(x2) - 3 - 3,2 - 3,5 - 4 - 4,5 - 5 - 6 - 8 - 10mm

PC015B 61,11 €


EXPOSITOR DE BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA

Expositores

Cinza

**HSS**

BROCAS DE HSS EM BLISTER

Brocas BC2B

$\frac{11,00}{5}$	$\frac{11,50}{5}$	$\frac{12,00}{5}$	$\frac{13,00}{5}$	$\frac{14,00}{5}$
$\frac{9,00}{5}$	$\frac{9,50}{5}$	$\frac{10,00}{5}$	$\frac{10,25}{5}$	$\frac{10,50}{5}$
$\frac{6,75}{5}$	$\frac{7,00}{5}$	$\frac{7,50}{5}$	$\frac{8,00}{10}$	$\frac{8,50}{5}$
$\frac{5,00}{10}$	$\frac{5,50}{10}$	$\frac{5,75}{5}$	$\frac{6,00}{10}$	$\frac{6,50}{5}$
$\frac{3,30}{5}$	$\frac{3,50}{10}$	$\frac{4,00}{10}$	$\frac{4,20}{5}$	$\frac{4,50}{10}$
$\frac{1,00}{10}$	$\frac{1,50}{10}$	$\frac{2,00}{10}$	$\frac{2,50}{10}$	$\frac{3,00}{10}$



515 mm
 330 mm (x2)
 360 mm

Ref. 1-62

1.419,20 €

Ref. BC2B

**HSS**

BROCAS DE HSS EM CAPA

Brocas BC2F

$\frac{8,00}{10}$	$\frac{8,50}{5}$	$\frac{9,00}{5}$	$\frac{10,00}{5}$	$\frac{10,50}{5}$	$\frac{11,00}{5}$	$\frac{12,00}{5}$	$\frac{13,00}{5}$
$\frac{4,50}{10}$	$\frac{5,00}{10}$	$\frac{5,25}{5}$	$\frac{5,50}{10}$	$\frac{6,00}{10}$	$\frac{6,50}{5}$	$\frac{6,75}{5}$	$\frac{7,00}{5}$
$\frac{1,00}{10}$	$\frac{1,50}{10}$	$\frac{2,00}{10}$	$\frac{2,50}{10}$	$\frac{3,00}{10}$	$\frac{3,25}{5}$	$\frac{3,50}{10}$	$\frac{4,25}{5}$



515 mm
 330 mm
 360 mm

Ref. 1-50

903,65 €

Ref. BC2F

*Plus*

BROCAS DE HSS EM CAIXA

Brocas BC2

$\frac{8,50}{10}$	$\frac{9,00}{20}$	$\frac{9,50}{10}$	$\frac{10,00}{30}$				
$\frac{6,00}{40}$	$\frac{6,50}{30}$	$\frac{7,00}{30}$	$\frac{7,50}{30}$	$\frac{8,00}{30}$			
$\frac{2,00}{50}$	$\frac{2,50}{50}$	$\frac{3,00}{50}$	$\frac{3,50}{50}$	$\frac{4,00}{50}$	$\frac{4,50}{50}$	$\frac{5,00}{50}$	$\frac{5,50}{30}$



515 mm
 330 mm
 360 mm

Ref. 1-44

1.653,90 €

Ref. BC2

*Plus*

BROCAS DE HSS EM CAIXA

Brocas BC2

$\frac{2,00}{100}$	$\frac{2,50}{50}$	$\frac{3,00}{100}$	$\frac{3,25}{50}$	$\frac{3,50}{50}$	$\frac{4,00}{100}$
$\frac{4,25}{50}$	$\frac{4,50}{50}$	$\frac{5,00}{100}$	$\frac{5,25}{50}$	$\frac{5,50}{50}$	$\frac{5,75}{50}$
$\frac{6,00}{50}$	$\frac{6,50}{50}$	$\frac{6,75}{20}$	$\frac{7,00}{50}$	$\frac{7,50}{30}$	$\frac{8,00}{40}$
$\frac{8,50}{20}$	$\frac{9,00}{40}$	$\frac{9,50}{20}$	$\frac{10,00}{40}$	$\frac{10,50}{10}$	
$\frac{11,00}{12}$	$\frac{11,50}{12}$	$\frac{12,00}{12}$	$\frac{12,50}{6}$	$\frac{13,00}{6}$	$\frac{14,00}{6}$



815 mm
 400 mm
 240 mm

Ref. 3-1

3.864,50 €

Ref. BC2



EXPOSITOR DE BROCAS CABO CILINDRICO RETIFICADAS DIN 338



Plus

BROCAS HSS-G EM BLISTER

Brocas BC02B

11,00 5	11,50 5	12,00 5	13,00 5	14,00 5
9,00 5	9,50 5	10,00 5	10,25 5	10,50 5
6,75 5	7,00 5	7,50 5	8,00 10	8,50 5
5,00 10	5,50 10	5,75 5	6,00 10	6,50 5
3,30 5	3,50 10	4,00 10	4,20 5	4,50 10
1,00 10	1,50 10	2,00 10	2,50 10	3,00 10



515 mm
330 mm (x2)
360 mm

Ref. 1-61

1.569,70 €



Ref. BC02B



Plus

BROCAS DE HSS-G EM CAPA

Brocas BC02F

8,00 10	8,50 5	9,00 5	10,00 5	10,50 5	11,00 5	12,00 5	13,00 5
4,50 10	5,00 10	5,25 5	5,50 10	6,00 10	6,50 5	6,75 5	7,00 5
1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,25 5	3,50 10	4,25 5



515 mm
330 mm
360 mm

Ref. 1-51

1.027,50 €



Ref. BC02F



Plus

BROCAS DE HSS-G EM CAIXA

Brocas BC02

8,50 10	9,00 20	9,50 10	10,00 30	
6,00 40	6,50 20	7,00 30	7,50 20	8,00 30
2,00 50	2,50 50	3,00 50	3,50 50	4,00 50
			4,50 50	5,00 50
				5,50 30



515 mm
330 mm
360 mm

Ref. 1-46

1.762,10 €



Ref. BC02



Plus

BROCAS DE HSS-G EM CAIXA

Brocas BC02

2,00 100	2,50 50	3,00 100	3,25 50	3,50 50	4,00 100
4,25 50	4,50 50	5,00 100	5,25 50	5,50 50	5,75 50
6,00 50	6,50 50	6,75 20	7,00 50	7,50 30	8,00 40
8,50 20	9,00 40	9,50 20	10,00 40	10,50 10	
11,00 12	11,50 12	12,00 12	12,50 6	13,00 6	14,00 6



815 mm
400 mm
240 mm

Ref. 3-2

4.314,92 €



Ref. BC02



EXPOSITOR DE BROCAS CABO CILINDRICO RETIFICADAS DIN 338

Expositores

Cinza

HSSCo
5%

BROCAS DE HSSCo EM BLISTER

Brocas BC5B

11,00 5	11,50 5	12,00 5	13,00 5	14,00 7
9,00 5	9,50 5	10,00 5	10,25 5	10,50 5
6,75 5	7,00 5	7,50 5	8,00 10	8,50 5
5,00 10	5,50 10	5,75 5	6,00 10	6,50 5
3,30 5	3,50 10	4,00 10	4,20 5	4,50 10
1,00 10	1,50 10	2,00 10	2,50 10	3,00 10



515 mm
330 mm (x2)
360 mm

Ref. 1-60

2.326,65 €



Ref. BC5B

HSSCo
5%

BROCAS DE HSSCo EM CAPA

Brocas BCSF

8,00 10	8,50 5	9,00 5	10,00 5	10,50 5	11,00 5	12,00 5	13,00 5
4,50 10	5,00 10	5,25 5	5,50 10	6,00 10	6,50 5	6,75 5	7,00 5
1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,25 5	3,50 10	4,25 5



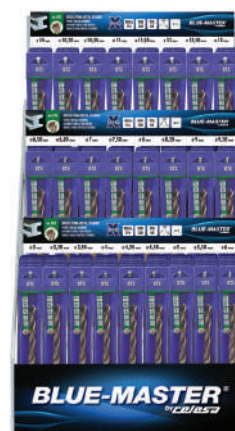
515 mm
330 mm
360 mm

Ref. 1-52

1.542,00 €



Ref. BCSF

HSSCo
5%

BROCAS DE HSSCo EM CAIXA

Brocas BC5

8,50 10	9,00 20	9,50 10	10,00 20				
6,00 30	6,50 20	7,00 30	7,50 20	8,00 30			
2,00 50	2,50 50	3,00 50	3,50 50	4,00 50	4,50 50	5,00 50	5,50 30



515 mm
330 mm
360 mm

Ref. 1-45

2.666,40 €



Ref. BC5

HSSCo
5%

BROCAS DE HSSCo EM CAIXA

Brocas BC5

2,00 100	2,50 50	3,00 100	3,25 30	3,50 30	4,00 100
4,25 30	4,50 30	5,00 100	5,25 20	5,50 30	5,75 30
6,00 50	6,50 20	6,75 20	7,00 30	7,50 20	8,00 30
8,50 10	9,00 30	9,50 10	10,00 30	10,50 10	
11,00 12	11,50 12	12,00 12	12,50 6	13,00 6	14,00 6



815 mm
400 mm
240 mm

Ref. 3-3

5.564,84 €



Ref. BC5





EXPOSITORES DE BROCAS CABO REDUZIDO



Ref. BC9P



515 mm
330 mm
360 mm

Ref. 1-3

3.148,46 €



HSS

BROCAS HSS CABO REDUZIDO EMBALAGEM TELESCÓPICA

Brocas BC9P

17,50 2	18,00 3	18,00 2	18,50 2	19,00 2	19,00 2	19,50 2	20,00 3
15,50 2	16,00 3	16,00 3	16,00 3	16,00 3	16,50 3	17,00 3	17,00 3
13,50 2	14,00 4	14,00 4	14,00 4	14,50 3	15,00 3	15,00 3	15,00 3



Ref. BC99P



515 mm
330 mm
360 mm

Ref. 1-6

4.565,92 €



HSSCo
5%

BROCAS HSSCO CABO REDUZIDO EMBALAGEM TELESCÓPICA

Brocas BC99P

17,50 2	18,00 2	18,00 2	18,50 2	19,00 2	19,00 2	19,50 2	20,00 2
15,50 2	16,00 2	16,00 2	16,00 2	16,00 2	16,50 2	17,00 2	17,00 2
13,50 2	14,00 3	14,00 3	14,00 2	14,50 2	15,00 2	15,00 2	15,00 2

EXPOSITORES DE BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA



HSS
TiN

BROCAS HSS+TiN EM BLISTER

Brocas BC18B

11,00 5	11,50 5	12,00 5	13,00 5	14,00 5
9,00 5	9,50 5	10,00 5	10,25 5	10,50 5
6,75 5	7,00 5	7,50 5	8,00 10	8,50 5
5,00 10	5,50 10	5,75 5	6,00 10	6,50 5
3,30 5	3,50 10	4,00 10	4,20 5	4,50 10
1,00 10	1,50 10	2,00 10	2,50 10	3,00 10



515 mm
330 mm (x2)
360 mm

Ref. 1-67

2.001,50 €



Ref. BC18B



HSS
TiN

BROCAS HSS+TiN EM CAPA

Brocas BC18F

8,00 10	8,50 5	9,00 5	10,00 5	10,50 5	11,00 5	12,00 5	13,00 5
4,50 10	5,00 10	5,25 5	5,50 10	6,00 10	6,50 5	6,75 5	7,00 5
1,00 10	1,50 10	2,00 10	2,50 10	3,00 10	3,25 5	3,50 10	4,25 5



Ref. BC18F

Ref. 1-54

1.373,85 €

515 mm
330 mm
360 mm




EXPOSITORES DE BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA

Expositores

Rosa


HSSCo
5%
INOX

BROCAS HSSCo 5% ANTI-SLIP EM BLISTER

Brocas BC95B

$\frac{6,50}{4}$	$\frac{8,00}{5}$	$\frac{9,00}{4}$	$\frac{10,00}{4}$	$\frac{DC95314}{4}$
$\frac{4,20}{3}$	$\frac{4,50}{5}$	$\frac{5,00}{5}$	$\frac{5,50}{5}$	$\frac{6,00}{5}$
$\frac{1,00}{5}$	$\frac{2,00}{5}$	$\frac{3,00}{5}$	$\frac{3,20}{3}$	$\frac{4,00}{5}$



515 mm
 330 mm
 360 mm

Ref. 1-25

664,35 €

Ref. BC95B


HSSCo
5%
INOX

BROCAS HSSCo 5% ANTI-SLIP EM CAPA

Brocas BC95F

$\frac{9,00}{5}$	$\frac{10,00}{5}$	$\frac{10,50}{5}$	$\frac{11,00}{5}$	$\frac{11,50}{5}$	$\frac{12,00}{5}$	$\frac{12,50}{5}$	$\frac{13,00}{5}$
$\frac{4,50}{10}$	$\frac{5,00}{10}$	$\frac{5,50}{10}$	$\frac{6,00}{10}$	$\frac{6,50}{10}$	$\frac{6,80}{10}$	$\frac{8,00}{10}$	$\frac{8,50}{5}$
$\frac{1,00}{10}$	$\frac{1,50}{10}$	$\frac{2,00}{10}$	$\frac{2,50}{10}$	$\frac{3,00}{10}$	$\frac{3,30}{10}$	$\frac{3,50}{10}$	$\frac{4,00}{10}$
							$\frac{4,20}{10}$

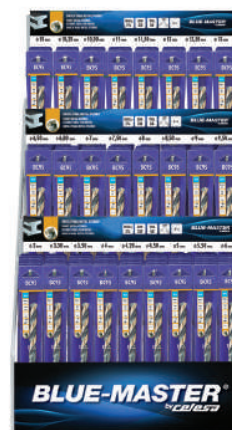


515 mm
 330 mm
 360 mm

Ref. 1-34

2.178,25 €

Ref. BC95F


HSSCo
5%
DIN
338

BROCAS HSSCo 5% EM BLISTER

Brocas BTXB

$\frac{10,00}{4}$	$\frac{11,00}{4}$	$\frac{12,00}{4}$	$\frac{13,00}{4}$	$\frac{PTX9314}{4}$
$\frac{6,00}{5}$	$\frac{6,50}{4}$	$\frac{7,00}{4}$	$\frac{8,00}{5}$	$\frac{9,00}{4}$
$\frac{3,00}{5}$	$\frac{4,00}{5}$	$\frac{4,50}{5}$	$\frac{5,00}{5}$	$\frac{5,50}{4}$

TURBO

Ref. 1-59

851,92 €

515 mm
 330 mm
 360 mm



Ref. BTXB


HSSCo
5%
DIN
338

BROCAS HSSCo 5% EM CAPA

Brocas BTXF

$\frac{10,00}{5}$	$\frac{10,20}{2}$	$\frac{10,50}{2}$	$\frac{11,00}{2}$	$\frac{11,50}{2}$	$\frac{12,00}{2}$	$\frac{12,50}{2}$	$\frac{13,00}{2}$
$\frac{6,50}{5}$	$\frac{6,80}{5}$	$\frac{7,00}{2}$	$\frac{7,50}{2}$	$\frac{8,00}{10}$	$\frac{8,50}{2}$	$\frac{9,00}{2}$	$\frac{9,50}{2}$
$\frac{3,00}{10}$	$\frac{3,30}{5}$	$\frac{3,50}{5}$	$\frac{4,00}{10}$	$\frac{4,20}{5}$	$\frac{4,50}{5}$	$\frac{5,00}{10}$	$\frac{5,50}{5}$
							$\frac{6,00}{10}$

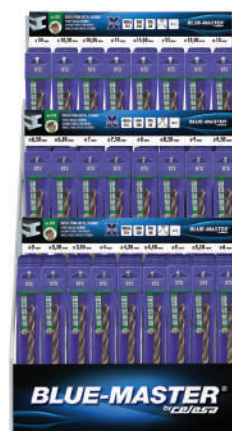


515 mm
 330 mm
 360 mm

Ref. 1-43

975,65 €
TURBO


Ref. BTXF





EXPOSITORES DE BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA



Ref. TTXB



515 mm
330 mm
360 mm

HSS	DIN 338	BROCAS HSS EM BLISTER
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Brocas TTXB

10,00 4	11,00 4	12,00 4	13,00 4	PTTX9314 4
6,00 5	6,50 4	7,00 4	8,00 5	9,00 4
3,00 5	4,00 5	4,50 5	5,00 5	5,50 4

TURBO

Ref. 1-36

807,08 €



Ref. TTXF

515 mm
330 mm
360 mm

TURBO

Ref. 1-20

882,09 €



HSS

DIN 338

BROCAS HSS EM CAPA

Brocas TTXF

$\frac{10,00}{5}$	$\frac{10,20}{2}$	$\frac{10,50}{2}$	$\frac{11,00}{2}$	$\frac{11,50}{2}$	$\frac{12,00}{2}$	$\frac{12,50}{2}$	$\frac{13,00}{2}$	
$\frac{6,50}{5}$	$\frac{6,80}{5}$	$\frac{7,00}{2}$	$\frac{7,50}{2}$	$\frac{8,00}{10}$	$\frac{8,50}{2}$	$\frac{9,00}{2}$	$\frac{9,50}{2}$	
$\frac{3,00}{10}$	$\frac{3,30}{5}$	$\frac{3,50}{5}$	$\frac{4,00}{10}$	$\frac{4,20}{5}$	$\frac{4,50}{5}$	$\frac{5,00}{10}$	$\frac{5,50}{5}$	$\frac{6,00}{10}$



TK02B



515 mm
330 mm
360 mm

HSS	DIN 338	PERFURAÇÃO EM SUPERFÍCIES CURVADAS E INSTÁVEIS
-----	---------	--

Brocas TK02B

10,00 5	11,00 2	12,00 2	13,00 2	PTK029314 4
6,00 10	6,50 5	7,00 5	8,00 10	9,00 5
3,00 10	4,00 10	4,50 5	5,00 10	5,50 5

STEP CUT

Ref. 1-65

1.379,80 €



TK02F

515 mm
330 mm
360 mm

STEP CUT

Ref. 1-66

1.734,95 €



HSS

DIN 338

PERFURAÇÃO EM SUPERFÍCIES CURVADAS E INSTÁVEIS

Brocas TK02F

$\frac{9,50}{5}$	$\frac{10,00}{5}$	$\frac{10,50}{2}$	$\frac{11,00}{2}$	$\frac{11,50}{2}$	$\frac{12,00}{2}$	$\frac{12,50}{2}$	$\frac{13,00}{2}$	
$\frac{5,50}{5}$	$\frac{6,00}{10}$	$\frac{6,50}{5}$	$\frac{7,00}{5}$	$\frac{7,50}{5}$	$\frac{8,00}{10}$	$\frac{8,50}{5}$	$\frac{9,00}{5}$	
$\frac{1,00}{10}$	$\frac{1,50}{5}$	$\frac{2,00}{10}$	$\frac{2,50}{5}$	$\frac{3,00}{10}$	$\frac{3,50}{5}$	$\frac{4,00}{10}$	$\frac{4,50}{5}$	$\frac{5,00}{10}$



EXPOSITORES DE BROCAS CABO CILINDRICO RETIFICADAS DIN 338 EM BLISTER E CAPA

HSSCo
5%DIN
338PERFURAÇÃO EM SUPERFÍCIES CURVADAS
E INSTÁVEIS

Brocas TK05B

10,00 5	11,00 2	12,00 2	13,00 2	PTK059314 4
6,00 10	6,50 5	7,00 5	8,00 10	9,00 5
3,00 10	4,00 10	4,50 5	5,00 10	5,50 4



STEP CUT

INOX

Ref. 1-91

1.677,38 €



TK05B

515 mm
330 mm
360 mm

TK05F

515 mm
330 mm
360 mm

STEP CUT

INOX

Ref. 1-92

2.122,39 €

HSSCo
5%DIN
338

PERFURAÇÃO EM SUPERFÍCIES CURVADAS E INSTÁVEIS

Brocas TK02F

$\frac{9,50}{5}$	$\frac{10,00}{5}$	$\frac{10,50}{2}$	$\frac{11,00}{2}$	$\frac{11,50}{2}$	$\frac{12,00}{2}$	$\frac{12,50}{2}$	$\frac{13,00}{2}$	
$\frac{5,50}{5}$	$\frac{6,00}{10}$	$\frac{6,50}{5}$	$\frac{7,00}{5}$	$\frac{7,50}{5}$	$\frac{8,00}{10}$	$\frac{8,50}{5}$	$\frac{9,00}{5}$	
$\frac{1,00}{10}$	$\frac{1,50}{5}$	$\frac{2,00}{10}$	$\frac{2,50}{5}$	$\frac{3,00}{10}$	$\frac{3,50}{5}$	$\frac{4,00}{10}$	$\frac{4,50}{5}$	$\frac{5,00}{10}$



EXPOSITORES DE BROCAS HSSCO 8% E HSS SERIE LONGA CABO CILINDRICO



HSS

DIN
340

BROCAS HSS SERIE LONGA EM CAPA

Brocas BC4F

$\frac{8,00}{10}$	$\frac{8,50}{5}$	$\frac{9,00}{5}$	$\frac{10,00}{5}$	$\frac{10,50}{5}$	$\frac{11,00}{5}$	$\frac{12,00}{5}$	$\frac{13,00}{5}$	
$\frac{4,50}{10}$	$\frac{5,00}{10}$	$\frac{5,25}{5}$	$\frac{5,50}{10}$	$\frac{6,00}{10}$	$\frac{6,50}{5}$	$\frac{6,75}{5}$	$\frac{7,00}{5}$	
$\frac{1,00}{10}$	$\frac{1,50}{10}$	$\frac{2,00}{10}$	$\frac{2,50}{10}$	$\frac{3,00}{10}$	$\frac{3,25}{5}$	$\frac{3,50}{10}$	$\frac{4,00}{10}$	$\frac{4,25}{5}$



Ref. BC4F

Ref. 1-19

1.375,40 €

515 mm
330 mm
360 mm515 mm
330 mm
360 mm

Ref. BC58F

Ref. 1-41

2.397,45 €

HSSCo
8%

BROCAS HSSCo 8% EM CAPA

Brocas BC58F

$\frac{8,00}{10}$	$\frac{8,50}{5}$	$\frac{9,00}{5}$	$\frac{10,00}{5}$	$\frac{10,50}{5}$	$\frac{11,00}{5}$	$\frac{12,00}{5}$	$\frac{13,00}{5}$	
$\frac{4,50}{10}$	$\frac{5,00}{10}$	$\frac{5,25}{5}$	$\frac{5,50}{10}$	$\frac{6,00}{10}$	$\frac{6,50}{5}$	$\frac{6,75}{5}$	$\frac{7,00}{5}$	
$\frac{1,00}{10}$	$\frac{1,50}{10}$	$\frac{2,00}{10}$	$\frac{2,50}{10}$	$\frac{3,00}{10}$	$\frac{3,25}{5}$	$\frac{3,50}{10}$	$\frac{4,00}{10}$	$\frac{4,25}{5}$





EXPOSITOR DE BROCAS E FRESAS ESPECIAIS PARA CHAVEIROS



BC5

HSSCo 5%



Form C

MD



BCC06

MD



BC7

PMD



BC98

PMD



BC85

MD



Form AE

MD

TiAlN



EXPOSITOR ESPECIAL DE SERRALHERIA

Brocas para metal HSSCo 5% ref: BC5B

3,00 4	4,00 4	5,00 4	6,00 4	8,00 4
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Fresas Forma C Cabo Ø 3 e Ø 6 mm em Blister

3x60 2	6x50 2	6x80 2	6x100 2	6x150 2
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Brocas ref: BCC06B / ref: BC7B / ref: BC98B / ref: BC85B e fresas Forma A/E em Blister

BCC06X60MDB 2	BC70600B 2	BC980600B 2	BC850600B 2	A60625-6EB 2
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515 mm
330 mm
360 mm

Ref. 1-86

142,00 €

1.167,18 €

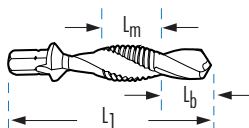


FERRAMENTAS COM CABO SEXTAVADO 1/4"

BROCA-MACHO ESCAREADOR

HSS-G

Ref. MAHMCR



	MAHMCRB		
	L1 x Lb x Lm mm		€
M 3 x 0,50	36 x 5 x 6	1/4"	27,03
M 4 x 0,70	39 x 6 x 7	1/4"	27,03
M 5 x 0,80	41 x 8 x 8	1/4"	28,10
M 6 x 1,00	44 x 8 x 10	1/4"	29,16
M 8 x 1,25	50 x 10 x 11	1/4"	39,36
M 10 x 1,50	59 x 11 x 11	1/4"	46,97



Colarinho



REFERÊNCIA	MAH9327CR
Nº BROCAS	4
REFERÊNCIA BROCAS	MAHMCR
CONTEÚDO	M4-M5-M6-M8-M10
P.V.P. €	182,64



JOGOS DE MACHOS EM BLISTER



Ref. MOB	M MF	DIN 13 60° P	HSS	M DIN 352	MF DIN 2181	TOL 6H
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				MOB
			L1 x L2 x mm	€
M3 x 0,50	3	2,50	40 x 11 x 2,7	25,83
M4 x 0,70	3	3,30	45 x 13 x 3,4	25,81
M5 x 0,80	3	4,20	50 x 16 x 4,9	27,69
M6 x 1,00	3	5,00	50 x 19 x 4,9	27,69
M8 x 1,25	3	6,75	56 x 22 x 4,9	33,16
M10 x 1,50	3	8,50	70 x 24 x 5,5	40,30
M12 x 1,75	3	10,25	75 x 29 x 7,0	55,71
M14 x 2,00	3	12,00	80 x 30 x 9,0	61,37

Blister: 165 x 105 mm.

DESANDADORES EM BLISTER



		GAB
		€
GA1B	M1 - M10	22,43
GA2B	M4 - M12	29,26

Blister GA1B: 75x285mm GA2B: 110x275mm

		TCB
		€
TC1B	M3 - M8	22,92
TC2B	M5 - M12	30,74

Blister: 165 x 105 mm.

EXPOSITOR DE JOGOS DE MACHOS EM BLISTER



515 mm
330 mm
360 mm

Ref. 1-78

3.903,00 €



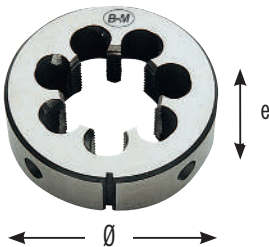
JOGOS DE MACHOS EM BLISTER

Machos MOB

M10 x 1,50 12	M12 x 1,75 12	M14 x 2,00 12
M6 x 1,00 12	M6 x 1,00 12	M8 x 1,25 12
M3 x 0,50 12	M4 x 0,70 12	M5 x 0,80 12



CAÇONETES PARA ROSCAGEM MANUAL EM BLISTER



Ref. CSB	M MF	HSS	M DIN 223	MF DIN 223	TOL 6g
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CSB			
		Ø x e mm	€
M3 x 0,50	1	25 x 9	34,55
M4 x 0,70	1	25 x 9	34,55
M5 x 0,80	1	25 x 9	34,55
M6 x 1,00	1	25 x 9	34,55
M8 x 1,25	1	25 x 9	36,34
M10 x 1,50	1	38 x 10	47,80
M12 x 1,75	1	38 x 10	51,71
M14 x 2,00	1	38 x 14	51,24

Blister: 165 x 105 mm.

DESANDADORES DE CAÇONETES EM BLISTER



Ref. VAB		DIN 225
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VAB		
		€
VA25B	25	15,58
VA38B	38	23,22

Blister VA25B: 75x285mm VA38B: 110x275mm

EXPOSITOR DE CAÇONETES EM BLISTER



Ref. 1-79

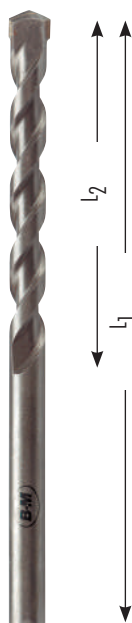
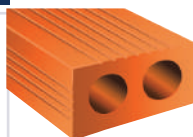
4.318,08 €



CAÇONETES EM BLISTER

Caçonetes CSB

M10 x 1,50 12	M12 x 1,75 12	M14 x 2,00 12
M6 x 1,00 12	M6 x 1,00 12	M8 x 1,25 12
M3 x 0,50 12	M4 x 0,70 12	M5 x 0,80 12



BROCAS PARA CONSTRUÇÃO DIN 8039 EM BLISTER



Ref. BW1B

DIN
8039

BW1B			
Ø mm	L1 x L2 mm		€
3,00	70 x 30	2	4,47
4,00	70 x 30	2	4,55
5,00	85 x 45	1	2,68
6,00	100 x 50	1	2,97
7,00	100 x 50	1	3,23

Blister: 190x60 mm

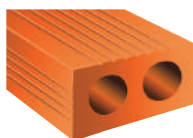
BW1B			
Ø mm	L1 x L2 mm		€
8,00	120 x 70	1	3,41
9,00	120 x 70	1	3,93
10,00	120 x 70	1	4,17
11,00	150 x 80	1	6,10
12,00	150 x 80	1	7,08
13,00	150 x 80	1	8,10
14,00	150 x 80	1	9,53

Blister: 230x60 mm

Aplicações: Tijolo, Concreto, Uralita, Pedra, Arenito

R.P.M. recomendadas:

MATERIAIS	Ø 3	Ø 5	Ø 8	Ø 10	Ø 12	Ø 13	Ø 14
Brando	3200	1900	1300	1100	900	800	700
Duro	2100	1200	900	700	600	500	400



BROCAS PARA CONSTRUÇÃO DIN 8039 EM BLISTER



Ref. BW6B

DIN
8039

BW6B			
Ø mm	L1 x L2 mm		€
3,00	70 x 30	2	9,27
4,00	70 x 30	2	9,27
5,00	85 x 45	1	4,92
6,00	100 x 50	1	5,39
7,00	100 x 50	1	5,96

Blister: 190x60 mm

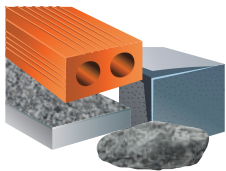
BW6B			
Ø mm	L1 x L2 mm		€
8,00	120 x 70	1	6,28
9,00	120 x 70	1	7,71
10,00	120 x 70	1	8,83
11,00	150 x 80	1	11,50
12,00	150 x 80	1	13,55
13,00	150 x 80	1	15,55
14,00	150 x 80	1	18,22

Blister: 230x60 mm

Aplicações: Betão sem hastes, Mármore, Granito, Ardósia, Todos os tipos de pedras

R.P.M. recomendadas:

MATERIAIS	Ø 3	Ø 5	Ø 8	Ø 10	Ø 12	Ø 13	Ø 14
Brando	3200	1900	1300	1100	900	800	700
Duro	2100	1200	900	700	600	500	400



BROCA SÉRIE EXTRA PROFISSIONAL PARA FURAR BETÃO COM PONTA DE METAL DURO

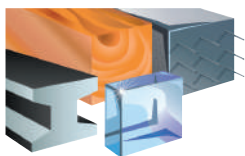


Ref. BW16B



BW16B			
Ø mm	L1 x L2 mm		€
4,00	75 x 38	2	10,75
5,00	85 x 45	1	5,43
6,00	100 x 55	1	6,00
7,00	100 x 64	1	6,91
Blister: 190x60 mm			

BW16B			
Ø mm	L1 x L2 mm		€
8,00	120 x 70	1	7,29
9,00	120 x 80	1	8,96
10,00	120 x 90	1	10,26
12,00	150 x 110	1	14,46
Blister: 230x60 mm			



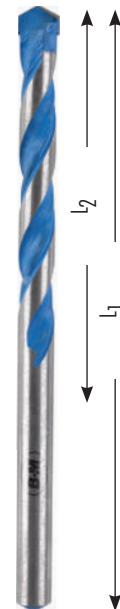
BROCAS COM PONTA DE METAL DURO MULTIUSO PROFISSIONAL DIN 8039 EM BLISTER



Ref. BW8B



DIN
8039



BW8B			
Ø mm	L1 x L2 mm		€
4,00	70 x 30	2	18,22
5,00	85 x 45	1	10,50
6,00	100 x 50	1	11,08
7,00	100 x 50	1	12,71
Blister: 190x60 mm.			

BW8B			
Ø mm	L1 x L2 mm		€
8,00	120 x 70	1	13,97
9,00	120 x 70	1	15,98
10,00	120 x 70	1	20,40
12,00	150 x 80	1	21,64
Blister: 230x60 mm.			

R.P.M. Recomendadas

MATERIAIS	Ø 3	Ø 5	Ø 8	Ø 10
Betão	1500	1300	900	800
Vidro	800	600	500	400
Aço	2000	1800	1000	600
Madeira	1600	1000	800	500
Porcelana	700	500	400	300
Plástico	2000	1200	750	550

Applications:

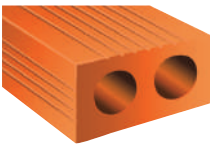


- Em percussão:
Betão, tijolo e pedra



- Em rotação:
Metal, cerâmica, madeira e plástico

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.



BROCA PARA MARTELO SDS-PLUS COM DUPLO CANAL SÉRIE PROFISSIONAL EM BLISTER



Ref. W05B

SDS Plus

W05B			
Ø mm	L1 x L2 mm		€
4x110	110 x 50	1	9,12
5x110	110 x 50	1	7,73
6x110	110 x 50	1	7,90
7x110	110 x 50	1	9,56
8x110	110 x 50	1	9,44
10x110	110 x 50	1	11,03
Blister: 190x60 mm			

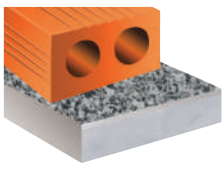
W05B			
Ø mm	L1 x L2 mm		€
5x160	160x100	1	9,31
6x160	160x100	1	8,75
7x160	160x100	1	11,46
8x160	160x100	1	10,07
10x160	160x100	1	11,54
12x160	160x100	1	12,86
14x160	160x100	1	21,82
Blister: 230x60 mm			

R.P.M. recomendadas:

MATERIAIS	Ø 3	Ø 5	Ø 8	Ø 10	Ø 12	Ø 14
Brando	3200	1900	1300	1100	900	700
Duro	2100	1200	900	700	600	400

Aplicações: Betão, material construção, mármore, granito , ardósia, todos os tipos de pedras.

Vantagens: Ponta auto-centrante. Maior velocidade e durabilidade. Mínima fricção devido à navalha estreita. Vida útil superior graças à reduzida fricção na ponta e nos canais. Maior rapidez de extração do pó do betão.



ESTOJOS DE BROCAS PARA CONSTRUÇÃO EM BLISTER



Cont.

15 (Ref. BW1) ★ ★	
Ø 3 (x3) - 4 (x3) - 5 (x3) - 6 (x2) - 8 (x2) - 10 (x2) mm.	
BW19329B	27,77 €

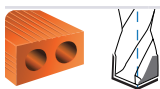
15 (Ref. BW6) ★ ★ ★ ★	
Ø 3 (x3) - 4 (x3) - 5 (x3) - 6 (x2) - 8 (x2) - 10 (x2) mm.	
BW69329B	64,94 €

15 (Ref. BW15) ★ ★ ★ ★ ★	
Ø 3 (x3) - 4 (x3) - 5 (x3) - 6 (x2) - 8 (x2) - 10 (x2) mm.	
BW159329B	46,58 € *

* Até o fim das existências.

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.

EXPOSITORES DE BROCAS PARA CONSTRUÇÃO



BROCAS DE PAREDE EM BLISTER

Brocas BW1B

$\frac{10,00}{10}$	$\frac{10,00}{10}$	$\frac{11,00}{7}$	$\frac{12,00}{7}$	$\frac{14,00}{7}$
$\frac{6,00}{15}$	$\frac{7,00}{15}$	$\frac{8,00}{10}$	$\frac{8,00}{10}$	$\frac{9,00}{10}$
$\frac{3,00}{18}$	$\frac{4,00}{18}$	$\frac{5,00}{15}$	$\frac{5,00}{15}$	$\frac{6,00}{15}$



515 mm
330 mm
360 mm

Ref. 1-70

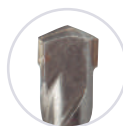
730,18 €



Ref. BW1B



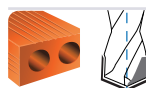
Ref. BW1



515 mm
330 mm
360 mm

Ref. 1-1

1.112,18 €



BROCAS DE PAREDE EM CAPA

Estojes BW1

$\frac{BW19318}{4}$	$\frac{BW19327}{4}$	$\frac{BW19328}{4}$	$\frac{BW19319}{4}$
---------------------	---------------------	---------------------	---------------------

Brocas BW1

$\frac{10,00}{8}$	$\frac{10,00}{8}$	$\frac{11,00}{6}$	$\frac{12,00}{6}$	$\frac{13,00}{4}$	$\frac{14,00}{4}$	$\frac{16,00}{4}$	$\frac{18,00}{4}$		
$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{50}$	$\frac{5,00}{50}$	$\frac{6,00}{50}$	$\frac{6,00}{50}$	$\frac{7,00}{10}$	$\frac{8,00}{50}$	$\frac{8,00}{50}$	$\frac{9,00}{10}$



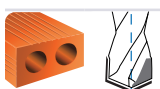
515 mm
330 mm
360 mm

Ref. 1-2

1.163,10 €



Ref. BW1



BROCAS DE PAREDE EM CAPA

Brocas BW1

$\frac{5x150}{5}$	$\frac{6x150}{5}$	$\frac{6x200}{5}$	$\frac{8x200}{5}$	$\frac{10x200}{5}$	$\frac{12x200}{5}$	$\frac{14x200}{2}$	$\frac{16x200}{2}$	$\frac{18x200}{2}$
$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{100}$	$\frac{6,00}{100}$	$\frac{7,00}{10}$	$\frac{8,00}{100}$	$\frac{9,00}{10}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$

Estojes BW1

$\frac{BW19328}{4}$	$\frac{BW19327}{4}$	$\frac{BW19318}{4}$	$\frac{BW19319}{4}$
---------------------	---------------------	---------------------	---------------------



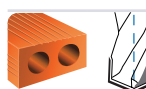
Ref. BW1



615 mm
330 mm
360 mm

Ref. 2-3

1.155,62 €



BROCAS DE PAREDE EM CAPA

Brocas BW1

$\frac{6 \times 400}{3}$	$\frac{8 \times 400}{3}$	$\frac{10 \times 400}{3}$	$\frac{12 \times 400}{3}$	$\frac{14 \times 400}{3}$	$\frac{16 \times 400}{2}$	$\frac{18 \times 400}{2}$		
$\frac{5 \times 150}{5}$	$\frac{6 \times 150}{5}$	$\frac{6 \times 200}{5}$	$\frac{8 \times 200}{5}$	$\frac{10 \times 200}{5}$	$\frac{12 \times 200}{5}$	$\frac{14 \times 200}{2}$	$\frac{16 \times 200}{2}$	$\frac{18 \times 200}{2}$
$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{100}$	$\frac{6,00}{100}$	$\frac{7,00}{10}$	$\frac{8,00}{100}$	$\frac{9,00}{10}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$

EXPOSITORES DE BROCAS PARA CONSTRUÇÃO



BROCAS BETÃO PROFISSIONAL EM BLISTER

Brocas BW6B

10,00 10	10,00 10	11,00 7	12,00 7	14,00 7
6,00 15	7,00 15	8,00 10	8,00 10	9,00 10
3,00 18	4,00 18	5,00 15	5,00 15	6,00 15



515 mm
330 mm
360 mm

Ref. 1-69

1.414,61 €



Ref. BW6B



Ref. BW6



515 mm
330 mm
360 mm

Ref. 1-4

1.941,06 €



BROCAS BETÃO PROFISSIONAL EM CAPA

Estojes BW6

BW69318 4	BW69327 4	BW69328 4	BW69319 4
--------------	--------------	--------------	--------------

Brocas BW6

$\frac{10,00}{8}$	$\frac{10,00}{8}$	$\frac{11,00}{6}$	$\frac{12,00}{6}$	$\frac{13,00}{4}$	$\frac{14,00}{4}$	$\frac{16,00}{4}$	$\frac{18,00}{4}$		
$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{30}$	$\frac{5,00}{30}$	$\frac{6,00}{30}$	$\frac{6,00}{30}$	$\frac{7,00}{10}$	$\frac{8,00}{30}$	$\frac{8,00}{30}$	$\frac{9,00}{10}$



BROCAS BETÃO PROFISSIONAL EM CAPA

Brocas BW6

5x150 5	6x150 5	6x200 5	8x200 5	10x200 5	12x200 5	14x200 2	16x200 2	18x200 2
3,00 10	4,00 10	5,00 50	6,00 50	7,00 10	8,00 50	9,00 10	10,00 8	12,00 6

Estojes BW6

BW69318 4	BW69327 4	BW69328 4	BW69319 4
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Ref. 1-5

1.822,91 €



515 mm
330 mm
360 mm



Ref. BW6



Ref. BW6



615 mm
330 mm
360 mm

Ref. 2-6

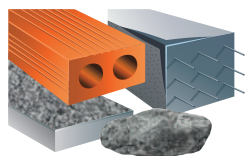
1.746,84 €



BROCAS BETÃO PROFISSIONAL EM CAPA

Brocas BW6

$\frac{6 \times 400}{3}$	$\frac{8 \times 400}{3}$	$\frac{10 \times 400}{3}$	$\frac{12 \times 400}{3}$	$\frac{14 \times 400}{3}$	$\frac{16 \times 400}{2}$	$\frac{18 \times 400}{2}$		
$\frac{5 \times 150}{5}$	$\frac{6 \times 150}{5}$	$\frac{6 \times 200}{5}$	$\frac{8 \times 200}{5}$	$\frac{10 \times 200}{5}$	$\frac{12 \times 200}{5}$	$\frac{14 \times 200}{2}$	$\frac{16 \times 200}{2}$	$\frac{18 \times 200}{2}$
$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{50}$	$\frac{6,00}{50}$	$\frac{7,00}{10}$	$\frac{8,00}{50}$	$\frac{9,00}{10}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$



EXPOSITORES DE BROCAS PARA CONSTRUÇÃO



BROCAS DELTA 3 PLUS EM BLISTER

Brocas BW35

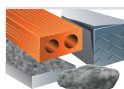
$\frac{5 \times 150}{6}$	$\frac{6 \times 150}{6}$	$\frac{8 \times 200}{5}$	$\frac{10 \times 200}{5}$	$\frac{12 \times 200}{5}$
$\frac{5,00}{8}$	$\frac{6,00}{8}$	$\frac{8,00}{8}$	$\frac{10,00}{5}$	$\frac{12,00}{5}$
$\frac{5,00}{8}$	$\frac{6,00}{8}$	$\frac{8,00}{8}$	$\frac{10,00}{5}$	$\frac{12,00}{5}$



Ref. BW35B

Ref. 1-48

783,32 €



BROCAS BETÃO EXTRA PROFISSIONAL EM BLISTER

Brocas BW16

BW169325		BW169327		BW169334	
5		5		5	
$\frac{7,00}{10}$	$\frac{8,00}{10}$	$\frac{9,00}{10}$		$\frac{10,00}{10}$	$\frac{12,00}{10}$
$\frac{4,00}{10}$	$\frac{5,00}{10}$	$\frac{5,00}{10}$		$\frac{6,00}{10}$	$\frac{6,00}{10}$



Ref. BW16B

Ref. 1-58

1.331,20 €

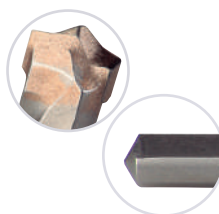


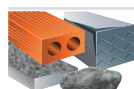
Diagram of a corner bracket with dimensions: 515 mm vertical, 330 mm horizontal, and 360 mm diagonal.



Diagram of a corner bracket with dimensions: 515 mm vertical, 330 mm horizontal, and 360 mm diagonal.

Ref. 2-32

1.237,49 €



BROCAS BETÃO EXTRA PROFISSIONAL EM CAPA

Brocas BW16

$\frac{10 \times 200}{3}$	$\frac{12 \times 200}{3}$	$\frac{BW169325}{5}$	$\frac{BW169327}{5}$	$\frac{BW169434}{5}$		
$\frac{16,00}{3}$	$\frac{5 \times 150}{5}$	$\frac{6 \times 150}{5}$	$\frac{8 \times 150}{5}$	$\frac{10 \times 150}{5}$	$\frac{6 \times 200}{3}$	$\frac{8 \times 200}{3}$
$\frac{4,00}{10}$	$\frac{5,00}{10}$	$\frac{6,00}{10}$	$\frac{8,00}{10}$	$\frac{10,00}{10}$	$\frac{12,00}{5}$	$\frac{14,00}{3}$

EXPOSITORES MISTOS DE BROCAS PARA PAREDE E BETÃO



EXPOSITOR BROCAS PARA PAREDE E BETÃO BW1, BW6 E BW16

BW16	$\frac{4,00}{10}$	$\frac{5,00}{10}$	$\frac{6,00}{10}$	$\frac{7,00}{10}$	$\frac{8,00}{10}$	$\frac{9,00}{6}$	$\frac{10,00}{6}$	$\frac{12,00}{6}$	
BW6	$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{30}$	$\frac{6,00}{30}$	$\frac{7,00}{10}$	$\frac{8,00}{30}$	$\frac{9,00}{10}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$
BW1	$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{30}$	$\frac{6,00}{30}$	$\frac{7,00}{10}$	$\frac{8,00}{30}$	$\frac{9,00}{10}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$

515 mm
330 mm
360 mm

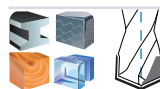
Ref. 1-8

1.347,88 €



515 mm
330 mm
360 mm

EXPOSITOR BROCAS MISTO BW16, BW6 E BW8



BW6	$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{15}$	$\frac{6,00}{15}$	$\frac{7,00}{10}$	$\frac{8,00}{10}$	$\frac{9,00}{10}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$
BW16	$\frac{4,00}{10}$	$\frac{5,00}{10}$	$\frac{6,00}{10}$	$\frac{7,00}{10}$	$\frac{8,00}{10}$	$\frac{9,00}{8}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$	
BW8	$\frac{4,00}{10}$	$\frac{5,00}{10}$	$\frac{6,00}{10}$	$\frac{7,00}{10}$	$\frac{8,00}{10}$	$\frac{9,00}{10}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$	

Ref. 1-12

1.675,46 €



ESTOJOS PARA PAREDE E BETÃO BW16, BW6 E BW1

BW16	$\frac{BW169325}{4}$	$\frac{BW169327}{4}$	$\frac{BW169434}{4}$	
BW6	$\frac{BW69325}{5}$	$\frac{BW69327}{5}$	$\frac{BW69328}{5}$	$\frac{BW69434}{5}$
BW1	$\frac{BW19325}{5}$	$\frac{BW19327}{5}$	$\frac{BW19328}{5}$	$\frac{BW19434}{5}$

515 mm
330 mm
360 mm

Ref. 1-14

1.354,24 €



EXPOSITORES DE BROCAS PARA CONSTRUÇÃO

Expositores

Rosa Cinza



Ref. BW9B



515 mm
330 mm
360 mm

Ref. 1-18

4.828,42 €



BROCAS PARA PORCELÂNICO EM BLISTER

Estojes de brocas BW9

	BW99325	BW99325	BW99318	BW99318
	4	4	4	4

Brocas BW9

	7,00 3	8,00 10	9,00 6	10,00 6	11,00 6
	3,00 10	4,00 12	5,00 10	6,00 12	6,00 12



BW9

CPS

BW7



BW9



CPS



BW7



EXPOSITOR MISTO PARA PORCELÂNICO

BW7	4,00 3	5,00 5	6,00 5	8,00 3	10,00 2
CPS	5,00 2	6,00 2	8,00 2	10,00 1	Guia centradora com refrigeração por água
BW9	4,00 2	5,00 5	6,00 5	8,00 2	10,00 2

Ref. 1-49

873,38 €

11,08 €

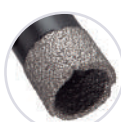
515 mm
330 mm
360 mm



BW7



CPS



CSE



BW7

CPS

CSE



EXPOSITOR MISTO PARA PORCELÂNICO

Brocas BW7

4,00 5	5,00 5	6,00 5	8,00 5	10,00 5
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Brocas CPS -

5,00 3	6,00 3	8,00 3	10,00 3	12,00 3
-----------	-----------	-----------	------------	------------

Guia

CGB

2

Fresa CSE

20,00 2	25,00 2	30,00 2	35,00 2	50,00 2
------------	------------	------------	------------	------------

Adaptador

ADCSE

2

515 mm
330 mm
360 mm

Ref. 1-27

822,49 €

922,70 €



EXPOSITOR DE BROCAS FURA TUDO PARA CONSTRUÇÃO



Ref. BW8B



BROCAS FURA TUDO EM BLISTER

Brocas BW8B

$\frac{9,00}{10}$	$\frac{10,00}{10}$	$\frac{10,00}{10}$	$\frac{12,00}{7}$	$\frac{12,00}{7}$
$\frac{6,00}{15}$	$\frac{7,00}{15}$	$\frac{7,00}{15}$	$\frac{8,00}{10}$	$\frac{8,00}{10}$
$\frac{4,00}{18}$	$\frac{4,00}{18}$	$\frac{5,00}{15}$	$\frac{5,00}{15}$	$\frac{6,00}{15}$

515 mm
330 mm
360 mm

Ref. 1-74

2.834,78 €

EXPOSITOR DE BROCAS E FRESAS PARA VIDRO



BROCAS E FRESAS PARA VIDRO EM BLISTER

Fresas BC70B

$\frac{16,00}{3}$	$\frac{18,00}{3}$	$\frac{20,00}{3}$
$\frac{10,00}{3}$	$\frac{12,00}{3}$	$\frac{14,00}{3}$

Brocas BC90B

$\frac{3,00}{5}$	$\frac{4,00}{5}$	$\frac{5,00}{5}$	$\frac{6,00}{4}$	$\frac{8,00}{4}$
------------------	------------------	------------------	------------------	------------------



BC90



BC70



Ref. BC90B



Ref. BC70B



Ref. 1-24

745,07 €

515 mm
330 mm
360 mm

EXPOSITOR DE BROCAS SDS PARA CONSTRUÇÃO



Ref. W05B



BROCAS SDS EM BLISTER

Brocas W05B

$\frac{8 \times 160}{7}$	$\frac{10 \times 110}{8}$	$\frac{10 \times 160}{7}$	$\frac{12 \times 160}{7}$	$\frac{14 \times 160}{7}$
$\frac{6 \times 160}{7}$	$\frac{7 \times 110}{8}$	$\frac{7 \times 160}{7}$	$\frac{8 \times 110}{8}$	$\frac{8 \times 160}{7}$
$\frac{4 \times 110}{8}$	$\frac{5 \times 110}{8}$	$\frac{5 \times 160}{7}$	$\frac{6 \times 110}{8}$	$\frac{6 \times 160}{7}$

515 mm
330 mm
360 mm

Ref. 1-72

1.170,65 €

EXPOSITORES DE BROCAS SDS PARA CONSTRUÇÃO

Expositores

Cinza



GAMA W08 ATÉ 20 X 200 MM.

Brocas W08

6,5x200 3	8x200 5	10x200 5	12x200 3	14x200 3	15x250 3	16x200 2	18x200 2	20x200 2
6x160 5	6x160 5	8x160 5	10x160 5	12x160 3	14x160 3	15x160 3	5x200 5	6x200 5
4x110 5	5x110 5	5x110 5	6x110 5	6x110 5	8x110 5	10x110 5	4x160 5	5x160 5

615 mm
330 mm
360 mm

Ref. 2-11

1.108,02 €



GAMA W05 ATÉ 20 X 200 MM.

Brocas W05

6x200 3	8x200 3	10x200 3	12x200 3	14x200 3	16x200 2	18x200 2	20x200 2
6x160 5	6x160 5	6x160 5	8x160 5	10x160 5	12x160 3	14x160 3	5x200 3
4x110 5	4x110 5	5x110 5	6x110 5	6x110 5	8x110 5	10x110 5	5x160 5

Ref. 2-12

1.025,90 €

615 mm
330 mm
360 mm



GAMA W05 ATÉ 20 X 200 MM.

Brocas W05

7x200 3	8x200 3	10x200 3	12x200 3	14x200 3	16x200 2	18x200 2	20x200 2
6x160 8	7x160 5	8x160 5	10x160 5	12x160 3	14x160 3	5x200 3	6x200 3
4x110 8	5x110 8	6x110 8	7x110 8	8x110 8	10x110 8	4x160 8	5x160 8

615 mm
330 mm
360 mm

Ref. 2-19

1.234,13 €



EXPOSITORES DE BROCAS SDS PARA CONSTRUÇÃO

Expositores

Cinza

SDS
Plus

GAMA W05 ATÉ 20 X 450 MM.

Brocas W05

18x300 2	20x300 2	10x450 2	12x450 2	14x450 2	16x450 2	18x450 2	20x450 2
14x200 5	16x200 5	18x200 2	20x200 2	10x300 3	12x300 3	14x300 2	16x300 2
5x160 10	6x160 10	8x160 10	10x160 5	12x160 5	14x160 5	10x200 5	12x200 5

Ref. 2-20

1.822,56 €

615 mm
330 mm
360 mm

SDS
Plus

GAMA W55 ATÉ 20 X 250 MM.

Brocas W55

6,5x210 2	8x210 2	10x210 2	12x200 2	14x200 2	16x250 2	18x250 2	20x250 2
6x160 5	6,5x160 5	8x160 5	10x160 5	12x160 3	14x160 3	5x210 2	6x210 2
5x110 5	5x110 5	6x110 5	6x110 5	8x110 5	10x110 5	5x160 5	6x160 5

615 mm
330 mm
360 mm

Ref. 2-13

1.248,05 €

Série
DeltaTOPSDS
Plus

BROCAS PARA FURAR BETÃO ARMADO W88 ATÉ 20 X 320 MM.

Brocas W88

14x270 2	16x270 2	10x320 2	12x320 2	14x320 2	16x320 2	18x320 2	20x320 1
8x220 3	10x220 3	12x220 2	14x220 2	6x270 3	8x270 3	10x270 3	12x270 2
5x120 5	6x120 5	8x120 5	10x120 5	6x170 5	8x170 5	10x170 3	6x220 3

615 mm
330 mm
360 mm

Ref. 2-31

1.648,33 €



EXPOSITORES DE BROCAS PARA CONSTRUÇÃO



BROCAS PARA FURAR BETÃO ARMADO W77 ATÉ 16 X 215 MM.

Brocas W77

14x165 1	15x165 1	5x215 2	6x215 2	8x215 2	10x215 2	12x215 1	14x215 1	16x215 1
6x165 5	6,5x165 2	7x165 1	8x165 5	9x165 1	10x165 5	11x165 1	12x165 2	13x165 1
5x115 5	5,5x115 2	6x115 5	6,5x115 2	7x115 2	8x115 5	10x115 2	5x165 5	5,5x165 1

615 mm
330 mm
360 mm

Ref. 2-28
1.080,89 €



BROCAS PARA FURAR BETÃO ARMADO W77 ATÉ 20 X 250 MM.

Brocas W77

6x215 2	8x215 2	10x215 2	12x215 2	14x215 1	15x265 1	16x215 1	18x250 1	20x250 1
6x165 3	6x165 3	6,5x165 2	8x165 3	10x165 3	12x165 2	14x165 2	15x165 2	5x215 2
5x115 3	5x115 3	6x115 3	6x115 3	6,5x115 2	8x115 3	10x115 3	5x165 3	5x165 3

615 mm
330 mm
360 mm

Ref. 2-26
1.248,59 €

EXPOSITOR DE BROCAS FURA TUDO PARA CONSTRUÇÃO



W99



BW8



GAMA BW8 ATÉ 12 X 150 MM.
GAMA W99 ATÉ 16 X 260 MM.

Brocas BW8

4x70 4	5x85 4	6x100 4	8x120 4	10x120 4	12x150 3	BW89325 4
-----------	-----------	------------	------------	-------------	-------------	--------------

Brocas W99

6x210 2	8x210 2	10x210 2	12x210 2	12x260 2	14x260 2	16x260 2
6x110 3	8x110 3	10x110 3	6x160 3	8x160 3	10x160 3	12x160 3

615 mm
330 mm
360 mm

Ref. 2-33
1.068,28 €



EXPOSITORES MISTOS PARA CONSTRUÇÃO: BROCAS AX, PUNTEIROS E CINZÉIS

Expositores

Cinza



GAMA AX ATÉ 30 X 320 MM.

Punteiros e cinzéis

P01280	P01400	P01600	C01280	C01400	C01600
2	2	2	2	2	2

Brocas AX

22x320	24x320	25x320	26x320	28x320	30x320
2	2	2	2	2	2
12x340	14x340	15x340	16x340	18x340	20x320
2	2	2	2	2	2

Ref. 2-23

3.414,27 €

 615 mm
 330 mm
 360 mm

 615 mm
 330 mm
 360 mm

Ref. 2-24

1.313,78 €



PUNTEIROS E CINZÉIS



Punteiros e cinzéis

P01280	P01400	P01600	C01280	C01400	C01600
2	2	2	2	2	2



Punteiros e cinzéis

C0150	C0175	C01115	CZ0150
2	2	2	2



Punteiros e cinzéis

P02250	P02250	C02250	C02250	CA02250	CZ02250
4	4	4	4	4	4



GAMA AX ATÉ 30 X 520 MM.

Punteiros e cinzéis

P01280	P01400	P01600	C01280	C01400	C01600
2	2	2	2	2	2

Brocas AX

16x540	18x540	20x520	22x520	24x520	25x520	30x520
2	2	2	2	2	2	2
12x340	14x340	16x340	18x340	20x320	22x320	24x320
2	2	2	2	2	2	2

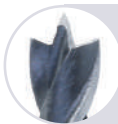
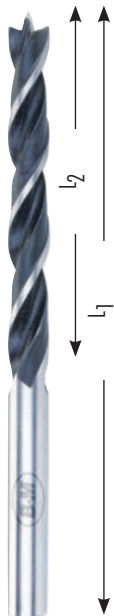
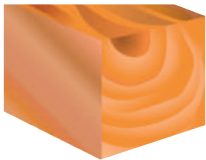
 615 mm
 330 mm
 360 mm

Ref. 2-22

4.052,37 €



BROCAS PARA MADEIRA EM BLISTER



Ref. BMB



CV



BMB			
Ø mm	L1 x L2 mm		€
3,00	59 x 35	2	3,95
4,00	74 x 41	2	4,10
5,00	82 x 55	1	2,73
6,00	88 x 58	1	2,92
7,00	110 x 70	1	3,11
Blister: 190x60 mm			

BMB			
Ø mm	L1 x L2 mm		€
8,00	110 x 70	1	3,63
9,00	110 x 70	1	4,25
10,00	115 x 75	1	4,52
11,00	135 x 85	1	5,63
12,00	135 x 85	1	6,15
13,00	135 x 90	1	5,97
14,00	145 x 95	1	6,54
Blister: 282x60 mm			

R.P.M. recomendadas:

MADEIRA	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 11
Brando	2000	1500	1300	1250	1200	1000	850
Duro	1400	1300	1100	1000	750	700	600



Ref. BMPRB



HSS



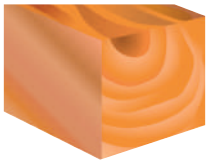
BMPRB			
Ø mm	L1 x L2 mm		€
3,00	59 x 35	2	5,57
4,00	74 x 41	2	5,99
5,00	82 x 55	1	3,66
6,00	88 x 58	1	4,56
7,00	110 x 70	1	5,27
Blister: 190x60 mm			

BMPRB			
Ø mm	L1 x L2 mm		€
8,00	110 x 70	1	6,24
9,00	110 x 70	1	7,55
10,00	115 x 75	1	7,51
11,00	135 x 85	1	8,89
12,00	135 x 85	1	9,80
13,00	135 x 90	1	10,48
14,00	145 x 95	1	11,49
Blister: 282x60 mm			

R.P.M. recomendadas:

MADEIRA	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 11
Brando	2000	1500	1300	1250	1200	1000	850
Duro	1400	1300	1100	1000	750	700	600

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.



BROCAS PLANAS PARA MADEIRA EM BLISTER



Ref. BMPB



CV



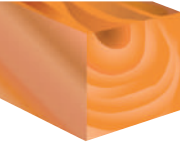
	BMPB			
	Ø mm	L1 x L2 mm		€
Blister: 230x60 mm	6,00	150	1	4,60
	8,00	150	1	4,90
	10,00	150	1	5,30
	12,00	150	1	5,65
	13,00	150	1	6,50
	14,00	150	1	6,08
	15,00	150	1	6,63
	16,00	150	1	6,22
	17,00	150	1	6,69
	18,00	150	1	6,27

	BMPB			
	Ø mm	L1 x L2 mm		€
Blister: 230x60 mm	19,00	150	1	7,12
	20,00	150	1	6,76
	22,00	150	1	7,79
	24,00	150	1	8,40
	25,00	150	1	9,46
	26,00	150	1	9,83
	28,00	150	1	10,38
	30,00	150	1	11,18
	32,00	150	1	11,91
	34,00	150	1	14,42
	35,00	150	1	14,64
	36,00	150	1	13,90
	38,00	150	1	14,61
	40,00	150	1	14,92

R.P.M. recomendadas:

MADEIRA	Ø 6	Ø 14	Ø 20	Ø 28	Ø 38
Brando	1400	1100	850	700	550
Duro	700	550	400	350	300

Sob demanda, podemos dotar aos nossos blisters dum sistema anti-furto por eletromagnetismo com um custo adicional do 0,07 € pelo blister, que pode ser colocado em todas as peças ou aleatoriamente.



ESTOJOS DE BROCAS PARA MADEIRA EM BLISTER



CV



Cont.

15 (Ref. BM) CV	
Ø 3 (x3) - 3,5 (x2) - 4 (x2) - 4,5 - 5 - 5,5 - 6 - 6,5 - 7 - 8 - 10 mm.	
BM9337B	27,25 €

EXPOSITORES DE BROCAS PARA MADEIRA



CV

BROCAS PARA MADEIRA CV EM BLISTER

Brocas BMB

13,00 6	14,00 6	15,00 6	16,00 6	18,00 6
8,00 10	9,00 10	10,00 10	11,00 10	12,00 6
3,00 18	4,00 18	5,00 15	6,00 15	7,00 15

Ref. 1-76

669,27 €



Ref. BMB



515 mm
330 mm
360 mm



Ref. BM

Ref. 1-26

1.104,93 €

515 mm
330 mm
360 mm



CV

BROCAS PARA MADEIRA CV EM CAPA

Estojo de brocas BM

BM9334 4	BM9333 4	BMPR9334 4	BMPR9333 4
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Brocas BM

<u>12,00</u> 6	<u>13,00</u> 3	<u>14,00</u> 3	<u>15,00</u> 3	<u>16,00</u> 3	<u>18,00</u> 3	<u>20,00</u> 3	L1 standard.	
<u>3,00</u> 15	<u>4,00</u> 15	<u>5,00</u> 50	<u>6,00</u> 50	<u>7,00</u> 10	<u>8,00</u> 50	<u>9,00</u> 10	<u>10,00</u> 50	<u>11,00</u> 6



CV

BROCAS PARA MADEIRA CV EM CAPA

Brocas BM

L1 450 mm.

8x450 4	10x450 4	12x450 4	14x450 4	16x450 4	18x450 4	20x450 4
------------	-------------	-------------	-------------	-------------	-------------	-------------

L1 300 mm.

5x300 4	6x300 4	7x300 4	8x300 4	9x300 4	10x300 4	12x300 4	14x300 4	16x300 4
------------	------------	------------	------------	------------	-------------	-------------	-------------	-------------

L1 standard

3,00 15	4,00 15	5,00 50	6,00 50	7,00 10	8,00 50	9,00 8	10,00 50	12,00 6
------------	------------	------------	------------	------------	------------	-----------	-------------	------------



Ref. BM

Ref. 2-25

1.525,78 €



615 mm
330 mm
360 mm



BROCAS 4 PONTAS PARA MADEIRA EM CAPA

Brocas BM4P

$\frac{30,00}{2}$	$\frac{32,00}{2}$	$\frac{35,00}{2}$	$\frac{40,00}{2}$	
$\frac{22,00}{4}$	$\frac{24,00}{4}$	$\frac{25,00}{3}$	$\frac{28,00}{3}$	
$\frac{10,00}{5}$	$\frac{12,00}{5}$	$\frac{16,00}{5}$	$\frac{18,00}{4}$	$\frac{20,00}{4}$

515 mm
320 mm
360 mm

Ref. 1-81

1.881,08 €



Ref. BM4P



EXPOSITORES DE BROCAS PARA MADEIRA

Expositores

Cinza

**HSS**

BROCAS PARA MADEIRA HSS EM BLISTER

Brocas BMPRB

$\frac{13,00}{6}$	$\frac{14,00}{6}$	$\frac{15,00}{6}$	$\frac{16,00}{6}$	$\frac{18,00}{6}$
$\frac{8,00}{10}$	$\frac{9,00}{10}$	$\frac{10,00}{10}$	$\frac{11,00}{10}$	$\frac{12,00}{6}$
$\frac{3,00}{18}$	$\frac{4,00}{18}$	$\frac{5,00}{15}$	$\frac{6,00}{15}$	$\frac{7,00}{15}$

Ref. 1-77

1.080,19 €

Ref. BMPRB

515 mm
330 mm
360 mm

**HSS**

BROCAS PARA MADEIRA HSS EM CAPA

Brocas BMPR

L1 400 mm.

$\frac{6x400}{3}$	$\frac{8x400}{3}$	$\frac{10x400}{3}$	$\frac{12x400}{3}$	$\frac{14x400}{3}$	$\frac{16x400}{3}$	$\frac{18x400}{3}$
-------------------	-------------------	--------------------	--------------------	--------------------	--------------------	--------------------

L1 245 mm.

$\frac{6x245}{4}$	$\frac{8x245}{4}$	$\frac{10x245}{4}$	$\frac{12x245}{4}$	$\frac{14x245}{4}$	$\frac{16x245}{4}$	$\frac{18x245}{4}$
-------------------	-------------------	--------------------	--------------------	--------------------	--------------------	--------------------

L1 standard.

$\frac{3,00}{12}$	$\frac{4,00}{12}$	$\frac{5,00}{15}$	$\frac{6,00}{15}$	$\frac{7,00}{10}$	$\frac{8,00}{10}$	$\frac{9,00}{10}$	$\frac{10,00}{8}$	$\frac{12,00}{6}$
-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------

615 mm
330 mm
360 mm

Ref. 2-27

2.169,09 €

Ref. BMPR



Ref. BMPB

515 mm
330 mm (x2)
360 mm

Ref. 1-75

2.742,70 €

BROCAS PLANAS PARA MADEIRA EM BLISTER

Brocas BMPB

$\frac{6,00}{12}$	$\frac{8,00}{12}$	$\frac{10,00}{12}$	$\frac{12,00}{12}$	$\frac{12,00}{12}$
$\frac{14,00}{12}$	$\frac{14,00}{12}$	$\frac{15,00}{12}$	$\frac{16,00}{12}$	$\frac{16,00}{12}$
$\frac{17,00}{12}$	$\frac{18,00}{12}$	$\frac{18,00}{12}$	$\frac{19,00}{12}$	$\frac{20,00}{12}$

Brocas BMPB

$\frac{20,00}{12}$	$\frac{22,00}{10}$	$\frac{22,00}{10}$	$\frac{24,00}{10}$	$\frac{24,00}{10}$
$\frac{25,00}{10}$	$\frac{26,00}{10}$	$\frac{28,00}{10}$	$\frac{30,00}{10}$	$\frac{32,00}{10}$
$\frac{34,00}{10}$	$\frac{35,00}{10}$	$\frac{36,00}{10}$	$\frac{38,00}{10}$	$\frac{40,00}{10}$



BROCAS PLANAS PARA MADEIRA EM CAPA

Brocas BMP

$\frac{26,00}{20}$	$\frac{28,00}{15}$	$\frac{30,00}{15}$	$\frac{32,00}{10}$	$\frac{35,00}{10}$	$\frac{40,00}{10}$		
$\frac{17,00}{3}$	$\frac{18,00}{20}$	$\frac{19,00}{3}$	$\frac{20,00}{20}$	$\frac{22,00}{20}$	$\frac{24,00}{20}$	$\frac{25,00}{20}$	
$\frac{6,00}{5}$	$\frac{8,00}{10}$	$\frac{10,00}{10}$	$\frac{12,00}{20}$	$\frac{13,00}{6}$	$\frac{14,00}{20}$	$\frac{15,00}{6}$	$\frac{16,00}{20}$

515 mm
330 mm
360 mm

Ref. 1-28

1.806,84 €

Ref. BMP





ESTOJOS DE BROCAS HSS, BETÃO E MADEIRA EM BLISTER



P0705B
46

13 U. Ø 2 - 8 x 0,5 mm.		HSS	DIN 338		25 mm PH1 - PH2 - PH3
5 U. Ø 4 - 5 - 6 - 8 - 10 mm.		DIN 8039		25 mm PZ1 - PZ2 - PZ3	
6 U. Ø 3 - 4 - 5 - 6 - 8 - 10 mm.		CV		25 mm P0,6X4,5 - P0,8X5,5	
6 U. Ø 10 - 12 - 16 - 18 - 22 - 24 mm.		1/4"		25 mm T20 - T30	

Ref. PMGX60 1/4"

99,09 €

P0706B
52

12 U. Ø 1,5 - 2 - 2,5 - 3 - 3,2 - 3,5 - 4 - 4,5 - 5 - 6 - 8 - 10 mm.		HSS	DIN 338		25 mm PH1 - PH2 - PH3
11 U. Ø 3 - 4 - 4,5 - 5 - 5,5 - 6 - 6,5 - 7 - 8 - 9 - 10 mm.		DIN 8039		25 mm PZ1 - PZ2 - PZ3	
10 U. Ø 3 (x2) - 4 (x2) - 5 - 6 - 7 - 8 - 9 - 10 mm.		CV		25 mm P0,6X4,5 - P0,8X5,5	
1/4" • 3 U. 6-8-10 x 48 mm					

Ref. PMGX60 1/4"

102,22 €

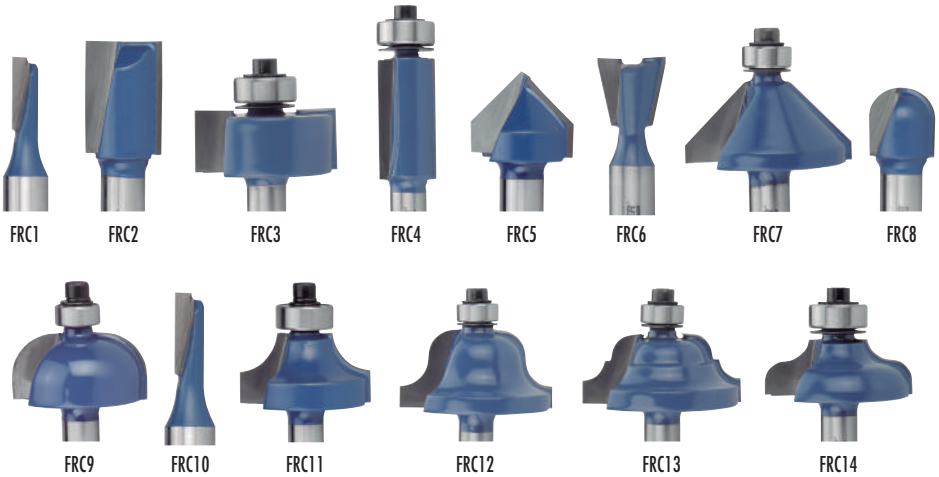
EXPOSITOR DE FRESAS DE METAL DURO PARA MADEIRA



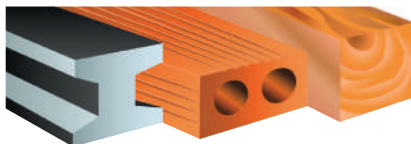
515 mm
330 mm
360 mm

Ref. 1-90

1.381,33 €



MD		FRESAS DE METAL DURO PARA MADEIRA					
		Fresas FRC					
<u>FRC10500</u>	<u>FRC10600</u>	<u>FRC10800</u>	<u>FRC11000</u>	<u>FRC21600</u>	<u>FRC21800</u>	<u>FRC22000</u>	
2	2	2	2	2	2	2	
<u>FRC32860</u>	<u>FRC41270</u>	<u>FRC51900</u>	<u>FRC61270</u>	<u>FRC73200</u>	<u>FRC81270</u>		
2	2	2	2	2	2		
<u>FRC92850</u>	<u>FRC103180</u>	<u>FRC113180</u>	<u>FRC123500</u>	<u>FRC133500</u>	<u>FRC143810</u>		
1	1	1	1	1	1		


EXPOSITORES MISTOS DE BROCAS PARA METAL, MADEIRA E BETÃO


515 mm
 330 mm
 360 mm

Ref. 1-82

750,90 €

EXPOSITOR MISTO QUALIDADE STANDARD

	BW1	3,00 10	4,00 10	5,00 15	6,00 15	8,00 10	10,00 10	Estojo	BW19325 5		
	BM	3,00 10	4,00 10	5,00 10	6,00 10	8,00 10	10,00 10	Estojo	BM9334 5		
	BC2	3,00 10	3,50 10	4,00 10	4,50 5	5,00 20	5,50 5	6,00 20	6,50 10	8,00 10	10,00 5


EXPOSITOR MISTO QUALIDADE PROFISSIONAL

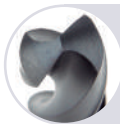
 BW6	$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{10}$	$\frac{6,00}{15}$	$\frac{8,00}{10}$	$\frac{10,00}{5}$	Estojos	$\frac{BW69325}{5}$		
 BMPR	$\frac{3,00}{10}$	$\frac{4,00}{10}$	$\frac{5,00}{10}$	$\frac{6,00}{10}$	$\frac{8,00}{10}$	$\frac{10,00}{5}$	Estojos	$\frac{BMPR9334}{3}$		
 BC5	$\frac{3,00}{5}$	$\frac{3,50}{5}$	$\frac{4,00}{10}$	$\frac{4,50}{5}$	$\frac{5,00}{10}$	$\frac{5,50}{5}$	$\frac{6,00}{10}$	$\frac{6,50}{5}$	$\frac{8,00}{10}$	$\frac{10,00}{5}$

515 mm
 330 mm
 360 mm

Ref. 1-83

1.067,41 €


BROCAS COM CABO SEXTAVADO 1/4" EM BLISTER



Ref. BH2B



DIN
338

HSS



118°



30°



OX



70
Kg/mm²

R.P.M. recomendadas:

METAL	Ø 2	Ø 4	Ø 6	Ø 8	Ø 10	Ø 12
Brando	3000	1600	950	800	630	450
Meio	2200	1200	725	625	490	375
Duro	1400	800	500	450	350	300

BH2B

	Ø mm	L1 x L2 mm			€
190x60 mm.	3,00	61 x 33	1/4"	1	9,01
	4,00	75 x 43	1/4"	1	10,45
	5,00	86 x 52	1/4"	1	13,00
	6,00	93 x 57	1/4"	1	14,04
	7,00	109 x 69	1/4"	1	17,18
230x60 mm.	8,00	117 x 75	1/4"	1	18,92
	9,00	125 x 81	1/4"	1	20,86
	10,00	133 x 87	1/4"	1	22,52



Ref. BWHB



DIN
8039

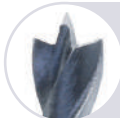


R.P.M. recomendadas:

METAL	Ø 3	Ø 5	Ø 8	Ø 10	Ø 12	Ø 13	Ø 14
Brando	3200	1900	1300	1100	900	800	700
Duro	2100	1200	900	700	600	500	400

BWHB

	Ø mm	L1 x L2 mm			€
190x60 mm.	3,00	70x30	1/4"	1	4,26
	4,00	70x30	1/4"	1	4,61
	5,00	85x45	1/4"	1	4,99
	6,00	100x50	1/4"	1	5,55
	7,00	100x50	1/4"	1	6,51
230x60 mm.	8,00	120x70	1/4"	1	7,54
	9,00	120x70	1/4"	1	9,03
	10,00	120x70	1/4"	1	10,11
	11,00	150x80	1/4"	1	12,58
	12,00	150x80	1/4"	1	13,55
	13,00	150x80	1/4"	1	16,66
	14,00	150x80	1/4"	1	19,02



Ref. BMHB



CV

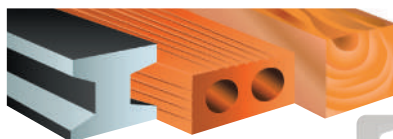


R.P.M. recomendadas:

METAL	Ø 3	Ø 5	Ø 8	Ø 10	Ø 12	Ø 13	Ø 14
Brando	2000	1500	1300	1250	1200	1000	850
Duro	1400	1300	1100	1000	750	700	600

BMHB

	Ø mm	L1 x L2 mm			€
190x60 mm.	3,00	59 x 35	1/4"	1	3,47
	4,00	74 x 41	1/4"	1	3,68
	5,00	82 x 55	1/4"	1	3,62
	6,00	88 x 58	1/4"	1	4,90
	7,00	110 x 70	1/4"	1	5,54
230x60 mm.	8,00	110 x 70	1/4"	1	5,78
	9,00	110 x 70	1/4"	1	6,00
	10,00	115 x 75	1/4"	1	6,64
	11,00	135 x 85	1/4"	1	7,75
	12,00	135 x 85	1/4"	1	8,23
	13,00	135 x 90	1/4"	1	12,88
	14,00	145 x 95	1/4"	1	15,17


EXPOSITORES MISTOS DE BROCAS COM CABO SEXTAVAVADO 1/4"


Ref. BH2B



Ref. BWHB



Ref. BMHB



BH2



BWH



BMH


BROCAS PARA BETÃO E MADEIRA
Estojo

	BWH	BWH9318	BWH9327		BMH	BMH9335	BMH9333
		4	4			4	4

Brocas em blister

	BMHB	4,00 8	5,00 10	6,00 10	8,00 8	10,00 5
		4,00 8	5,00 10	6,00 10	8,00 8	10,00 5

Ref. 1-38

845,07 €
 515 mm
 330 mm
 360 mm

 515 mm
 330 mm
 360 mm

Ref. 1-39

1.236,53 €
BROCAS PARA METAL, BETÃO E MADEIRA

	BH2B	4,00 10	5,00 10	6,00 10	8,00 10	10,00 10
	BWHB	4,00 8	5,00 10	6,00 10	8,00 8	10,00 5
	BMHB	4,00 8	5,00 10	6,00 10	8,00 8	10,00 5

Ref. 1-40

1.780,25 €
 515 mm
 330 mm
 360 mm

BROCAS PARA METAL E BETÃO
Estojo

	BWH	BWH9318	BWH9327		BH2	BH29335	BH29333
		4	4			4	4

Brocas em blister

	BH2B	4,00 10	5,00 10	6,00 10	8,00 10	10,00 10
		4,00 8	5,00 10	6,00 10	8,00 8	10,00 5

EXPOSITORES DE BITS PARA PARAFUSOS E PORTA-BITS



820 mm
400 mm
220 mm

Plus

Ref. 5-1

1.142,25 €

CAIXAS DE BITS PARA PARAFUSOS DE 2 PECAS

 25 mm	<u>PH1-2</u> 5	<u>PH2-2</u> 5	<u>PH3-2</u> 5	 50 mm	<u>PH1X50-2</u> 5	<u>PH2X50-2</u> 5	<u>PH3X50-2</u> 5
 25 mm	<u>PZ1-2</u> 5	<u>PZ2-2</u> 5	<u>PZ3-2</u> 5	 50 mm	<u>PZ1X50-2</u> 5	<u>PZ2X50-2</u> 5	<u>PZ3X50-2</u> 5
 25 mm	<u>PT10-2</u> 5	<u>PT15-2</u> 5	<u>PT20-2</u> 5	<u>PT25-2</u> 5	<u>PT30-2</u> 5	<u>PT40-2</u> 5	
 50 mm	<u>PT10X50-2</u> 5	<u>PT15X50-2</u> 5	<u>PT20X50-2</u> 5	<u>PT25X50-2</u> 5	<u>PT30X50-2</u> 5	<u>PT40X50-2</u> 5	
 25 mm	<u>PHX2-2</u> 5	<u>PHX4-2</u> 5	<u>PHX6-2</u> 5	<u>PHX8-2</u> 5			
 25 mm	<u>P0,6X4,5-2</u> 5	<u>P0,8X5,5-2</u> 5	<u>P1,2X6,5-2</u> 5				

Ref. PMGX51 (x5) · Ref. PMGSDSX78 (x5) Porta-bits magnético

Ref. PCRX74 (x5) Porta-bits magnético com mudança rápida

Ref. PCTX60 (x5) Porta-bits magnético com colarinho



Plus

Ref. 5-2

1.976,85 €

CAIXAS DE BITS PARA PARAFUSOS DE 5 PECAS

 25 mm	<u>PH1-5</u> 5	<u>PH2-5</u> 5	<u>PH3-5</u> 5	 50 mm	<u>PH1X50-5</u> 5	<u>PH2X50-5</u> 5	<u>PH3X50-5</u> 5
 25 mm	<u>PZ1-5</u> 5	<u>PZ2-5</u> 5	<u>PZ3-5</u> 5	 50 mm	<u>PZ1X50-5</u> 5	<u>PZ2X50-5</u> 5	<u>PZ3X50-5</u> 5
 25 mm	<u>PT10-5</u> 5	<u>PT15-5</u> 5	<u>PT20-5</u> 5	<u>PT25-5</u> 5	<u>PT30-5</u> 5	<u>PT40-5</u> 5	
 50 mm	<u>PT10X50-5</u> 5	<u>PT15X50-5</u> 5	<u>PT20X50-5</u> 5	<u>PT25X50-5</u> 5	<u>PT30X50-5</u> 5	<u>PT40X50-5</u> 5	
 25 mm	<u>PHX2-5</u> 5	<u>PHX4-5</u> 5	<u>PHX6-5</u> 5	<u>PHX8-5</u> 5			
 25 mm	<u>P0,6X4,5-5</u> 5	<u>P0,8X5,5-5</u> 5	<u>P1,2X6,5-5</u> 5				

Ref. PMGX51 (x5) · Ref. PMGSDSX78 (x5) Porta-bits magnético

Ref. PCRX74 (x5) Porta-bits magnético com mudança rápida

Ref. PCTX60 (x5) Porta-bits magnético com colarinho



Plus

Ref. 5-3

1.453,35 €

CAIXAS DE BITS PARA PARAFUSOS DE 2 E 5 PECAS

 25 mm	<u>PH1-5</u> 5	<u>PH2-5</u> 5	<u>PH3-5</u> 5	 50 mm	<u>PH1X50-2</u> 5	<u>PH2X50-2</u> 5	<u>PH3X50-2</u> 5
 25 mm	<u>PZ1-5</u> 5	<u>PZ2-5</u> 5	<u>PZ3-5</u> 5	 50 mm	<u>PZ1X50-2</u> 5	<u>PZ2X50-2</u> 5	<u>PZ3X50-2</u> 5
 25 mm	<u>PT10-5</u> 5	<u>PT15-5</u> 5	<u>PT20-5</u> 5	<u>PT25-5</u> 5	<u>PT30-5</u> 5	<u>PT40-5</u> 5	
 50 mm	<u>PT10X50-2</u> 5	<u>PT15X50-2</u> 5	<u>PT20X50-2</u> 5	<u>PT25X50-2</u> 5	<u>PT30X50-2</u> 5	<u>PT40X50-2</u> 5	
 25 mm	<u>PHX2-5</u> 5	<u>PHX4-5</u> 5	<u>PHX6-5</u> 5	<u>PHX8-5</u> 5			
 25 mm	<u>P0,6X4,5-5</u> 5	<u>P0,8X5,5-5</u> 5	<u>P1,2X6,5-5</u> 5				

Ref. PMGX51 (x5) · Ref. PMGSDSX78 (x5) Porta-bits magnético

Ref. PCRX74 (x5) Porta-bits magnético com mudança rápida

Ref. PCTX60 (x5) Porta-bits magnético com colarinho

EXPOSITOR MISTO BROCAS ESCAREADORAS


Ref. AV30B



Ref. AV40B


HSS

BROCAS ESCAREADORAS E ESCALONADAS DE DUPLO CORTE

Brocas escareadoras

AV30	AV30BM0 4	AV30BM1 4	AV30BM2 4
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Brocas escalonadas

AV40	AV40BM5 4	AV40BM8 4	AV40BM9 4
AV40	AV40BM2 4	AV40BM3 4	AV40BM4 4

Ref. 1-47

2.943,36 €


EXPOSITOR MISTO DE FOLHAS DE SERRA TICO-TICO


METAL P5520



MADEIRA P5525



MULTIUSO P5526



FOLHAS DE SERRA TICO-TICO MISTAS

5 Folhas de serra Tico-Tico em blister

P5525 10	P5526 10	P5509 10	P5519 10
P5505 10	P5516 10	P5520 10	P5522 10
P5501 10	P5502 10	P5503 10	P5504 10



Ref. 1-33

1.512,30 €



Ref. 1-101

1.645,52 €

EXPOSITOR FRESAS HA E ADAPTADORES


FRESAS HA E ADAPTADORES

80 1	68 1	HA11x320 3	HA320SDS 3
68 1	50 2	40 2	HA220SDS 3
35 2	30 2	25 2	HA100SDS 3

EXPOSITORES DE SERRAS CRANEANAS EM BLISTER



Ref. CB	HSS M3	4/6		Al		Cu - Ni - La	FUNDIÇÃO	PVC	
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ADAPTADORES EXPOSITOR DE SERRAS CRANEANAS BLUEMASTER

B5519S	CB16B	CB19B	CB20B	CB22B	CB25B	CB27B	CB30B
Ø 14-30	Ø 16	Ø 19	Ø 20	Ø 22	Ø 25	Ø 27	Ø 30
5	3	3	3	3	3	3	3
B5546S	CB32B	CB35B	CB40B	CB48B	CB50B	CB60B	CB68B
Ø32-210	Ø 32	Ø 35	Ø 40	Ø 48	Ø 50	Ø 60	Ø 68
4	3	3	2	2	2	2	2

Ref. CBEXP1B

810,93 €



Ref. COB	HSSCo 8%	4/6		INOX		Cu - Ni - La	FUNDIÇÃO
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ADAPTADORES EXPOSITOR DE SERRAS CRANEANAS HSSCo 8% BLUEMASTER

B5519S	COB16B	COB19B	COB20B	COB22B	COB25B	COB27B	COB30B
Ø 14-30	Ø 16	Ø 19	Ø 20	Ø 22	Ø 25	Ø 27	Ø 30
5	3	3	3	3	3	3	3
B5546S	COB32B	COB35B	COB40B	COB48B	COB51B	COB60B	COB68B
Ø32-210	Ø 32	Ø 35	Ø 40	Ø 48	Ø 51	Ø 60	Ø 68
4	3	3	2	2	2	2	2

Ref. COBEXP1B

833,87 €



Ref. MGB	Tungsteno				FUNDIÇÃO				
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ADAPTADORES EXPOSITOR DE FRESAS MASTER-GRIT

B5519-CMS	B8537S	MG19B	MG20B	MG22B	MG25B	MG29B	MG32B
Ø 14-30	Broca Guia	Ø 19	Ø 20	Ø 22	Ø 25	Ø 29	Ø 32
5	6	3	3	3	3	3	3
B5546-CMS	MG35B	MG38B	MG44B	MG48B	MG51B	MG60B	MG70B
Ø32-210	Ø 35	Ø 38	Ø 44	Ø 48	Ø 51	Ø 60	Ø 70
3	3	2	2	2	2	2	2

Ref. REMEXPB

1.029,59 €